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ABSTRACT

The Milwaukee Area Technical College (MATC) educational master plan is a 5-year operational action plan to implement the MATC Board's Strategic Planning Statements of 1983 and 1985. Chapter I of the plan provides a brief history of educational planning at the college and MATC's mission statement. After chapter II presents an analysis of the population of the MATC district, chapter III analyzes high school graduates and postsecondary schools in the MATC district. Chapter IV offers an analysis and projection of MATC enrollments. Chapters V and VI include an overview of the local employment outlook and operational planning assumptions and recommendations. Chapter VII highlights significant issues that require study and recommendations including entrance requirements, remedial and basic education, and high technology programming. Chapter VIII contains a summary of instructional division and department plans including proposed new instructional programs, expansion of existing programs, and specially funded programs and activities. Chapters IX through XI provide information on physical facility needs, 5-year equipment and financial plans. Finally, chapter XII presents a summary and recommendations. The report includes detailed tables. (HB)

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MILWAUKEE AREA TECHNICAL COLLEGE

FIVE-YEAR EDUCATIONAL MASTER PLAN

April 1985

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MATC EDUCATIONAL MASTER PLAN

PREFACE

The MATC Educational Master Plan is a five-year operational action plan to implement the MATC Board's Strategic Planning Statements of 1983 and 1985. The preparation of the Educational Plan has been directed by the District Director, Executive Dean, Executive Committee, and MATC Administrative Cabinet. The Research, Planning, and Development Department has coordinated the writing of the Educational Plan. All instructional and non-instructional departments have prepared planning materials for their areas and the knowledge and experience of faculty and staff have been utilized in program, physical facility, and equipment plans. The following should be acknowledged for their contribution to the Five-Year Educational Master Plan:

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FIVE-YEAR EDUCATIONAL MASTER PLAN

TABLE OF CONTENTS

		Page
PREFACE		ii
Chapter I	Introduction	1
Chapter II	Analysis of the Population of the MATC District	3
Chapter III	Analysis of High School Graduates and Post-secondary Schools in the MATC District	16
Chapter IV	Analysis and Projection of MATC Enrollments	26
Chapter V	Overview of Employment Outlook	43
Chapter VI	Operational Planning Assumptions and Recommendations	50
Chapter VII	Educational Planning Issues	54
	Entrance Requirements for Instructional Programs	54
	Remedial and Basic Education	56
	Evaluation of Instructional Programs	60
	Criteria for Determining Educational Programming by Campus Location	62
	Outreach, Customized Training, and Technical Assistance	64
	High School Contract Program and Adult High School	67
	High Technology Programming	70
Chapter VIII	Summary of Instructional Division and Department Plans	74
	Proposed New Instructional Programs	74
	Expansion of Existing Instructional Programs	82
	Program or Service Reduction	87
	Special Funded Programs and Activities	89
Chapter IX	Physical Facility Needs	93
Chapter X	Five Year Equipment Plan	112
Chapter XI	Five Year Finance Plan	119
Chapter XII	Summary and Recommendations	130

LIST OF TABLES

		Page
CHAPTER II		
Table 1	MATC District Population Projections.	5
Table 2	Components of Population Change for Wisconsin, the MATC District, and Minorities Within the MATC District.	6
Table 3	Yearly Family Income Before Taxes	9
Table 4	Labor Force Status by Sex and Race (16 Years and Over).	12
Table 5	Population by Community 1970-1980	13
Table 6	MATC District Persons 25 Years and Over by Race, by Years of School Completed.	15
CHAPTER III		
Table 1	Number of Public High School Graduates 1979-1988.	17
Table 2	Number of Parochial and Private High School Graduates 1979-1988	18
Table 3	Percent of Public and Parochial High School Graduates Attending MATC Day School Immediately After Graduation - 1982-1984.	19
Table 4	Institution Previously Attended - 1982-1983	21
Table 5	Postsecondary Education, Colleges in the MATC District.	22
Table 6	Trade and Vocational Schools in the MATC District	24
CHAPTER IV		
Table 1	Historical Day and Evening MATC District Fall Enrollments and Annual FTEs.	27
Table 2	Day, Evening, and Total MATC Headcount Enrollments by Campus and Evening Center - Day and Evening Semester 1, 1984 and Totals for 1981-84	29
Table 3	Number and Percent of FTEs Accepted by State Code - 1980-81 to 1983-84.	33
Table 4	FTE by Instructional Division, 1977-78 - 1983-84.	36
Table 5	FTEs by Location, Instructional Division and Time, 1980-81 to 1983-84.	38
Table 6	MATC Annual Median Age, 1974-75 to 1983-84, Day and Evening	41
Table 7	Postsecondary - Annual Day and Evening Headcount by Age, and Projections Based on Percentage of District Population - Enrolled by Age to the Year 2000	42
CHAPTER XI		
Table 1	Historical Financial Analysis	121
Table 2	Five-Year Educational Master Plan - Finance Plan.	124
Table 3	Low/Medium/High Revenue Projection Comparisons.	125
Table 4	MATC Five-Year Educational Plan, Capital Budget Plan Summary. .	127
Table 5	Five-Year Educational Master Plan - Finance Plan.	128
Table 6	Five-Year Educational Master Plan - Finance Plan.	129

LIST OF FIGURES

CHAPTER II

		Page
Figure 1	Actual and Projected Population by Age MATC District, 1980-2000	7
Figure 2	MATC District (16 Statistical Areas Used in Table 3)	8
Figure 3	Yearly Family Income Before Taxes, Percent of Households by Income Brackets in the MATC District, October 1983	10
Figure 4	Population Change in the MATC District from 1970 to 1980.	14

LIST OF GRAPHS

CHAPTER IV

Graph 1	Total Day and Evening Headcount Enrollments, Semester 1 and 2 - 1976-77 to 1984-85.	30
Graph 2	MATC FTE Enrollments, 1976-77 to 1983-84	34
Graph 3	Change in Number and Percent of Annual FTE by Instructional Division from 1977-78 to 1983-84	35

CHAPTER XI

Graph 1	Operating Tax Levy, % of Limit	122

LIST OF APPENDIXES

Appendix A -	MATC Program Distribution by Campus by 1990	146
Appendix B -	Five-Year Average of Enrollment, Graduates and Placement Percentages of MATC Associate Degree and Diploma Programs.	153

CHAPTER I

INTRODUCTION

A District Master Plan was adopted by the Milwaukee Area Technical College Board in June 1973. This MATC District Master Plan was approved by the State VTAE Board in August 1973, approximately four years after the formation of the MATC District, which was initiated on July 1, 1969 when the Milwaukee, West Allis, and Cudahy Vocational Schools joined to operate as a District. On July 1, 1970, the present MATC District, composed of 21 Public School Districts that include all of Milwaukee County, most of Ozaukee County, and parts of Waukesha and Washington Counties, began operations.

The 1973 MATC Master Plan resulted in the construction of new North and South Campuses, which opened in 1976. Extensive remodeling and an addition to the West Campus were completed in 1977, and more than $16 million in renovation and remodeling at the Milwaukee Campus since 1973. The only physical facility proposed in the 1973 Master Plan which has not been initiated or completed is a new building at the Milwaukee Campus. MATC Physical Facility Plans, which have been prepared simultaneously with this Education Plan, recommend renovation and updating of instructional facilities and the construction of a new building at the Milwaukee Campus to consolidate Student Services and Activities facilities.

MISSION OF THE MILWAUKEE AREA TECHNICAL COLLEGE

The Mission of the Milwaukee Area Technical College in its present form was adopted by the MATC Board in 1972. The Mission Statement was reviewed and revised in 1982 after recommendations were made by the Organization and Functions Evaluation and Planning Committee, the Director, and the MATC Administrative Cabinet. The MATC Board revised the Mission Statement in October 1983 and March 1985 to the following statement.

The Milwaukee Area Technical College is a publicly supported institution committed to increasing the usefulness and productiveness of the people in the MATC community. MATC shall maintain a broad and comprehensive curriculum and support services as determined by community needs and financial capabilities of the institution. Educational programming shall include, in the following order of priority:

1. Vocational and technical education for entry into the job market.

2. Training, retraining, and upgrading which is necessary for advancement or competence in a vocational or technical skill and which includes customized training and technical assistance to business and industry.

3. Remedial or special education in basic skills which may be a prerequisite to vocational training or employment.

4. Contracting with secondary schools to provide educational opportunities to high school students.

5. Courses that will enable students to continue their education at other institutions.

6. The opportunity for personal, civic, and cultural enrichment to improve the quality of life.

The objectives of the Educational Plan are as follows:

1. To describe the present and future population of the District.

2. To analyze MATC day and evening enrollment trends.

3. To describe future employment outlook and changes in occupations and jobs.

4. To indicate the basic assumptions for planning, and the critical issues to be addressed in educational planning.

5. To suggest new programs to be offered in the District and programs for possible discontinuance or expansion by Campus.

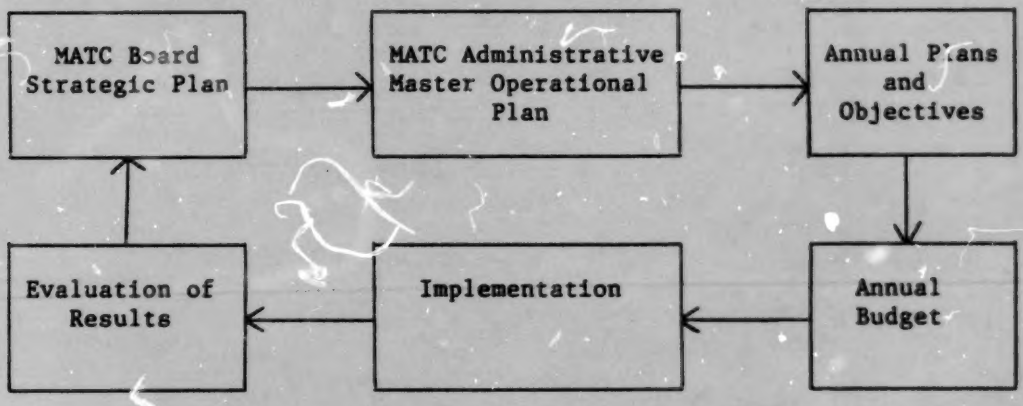
6. To plan for new, expanding, reduced or discontinued services or special programs.

7. To indicate major educational equipment needs.

8. To suggest additions and modifications to physical facilities for instructional and service areas.

9. To provide a Financial Plan for the future development of the District.

The Five-Year Educational Master Plan will be reviewed each year and revised as needed. The MATC Planning Process is as follows:



The process is now in place and will continue to be followed in the future.

CHAPTER II

ANALYSIS OF THE POPULATION OF THE MATC DISTRICT

NATIONAL POPULATION TRENDS [1]

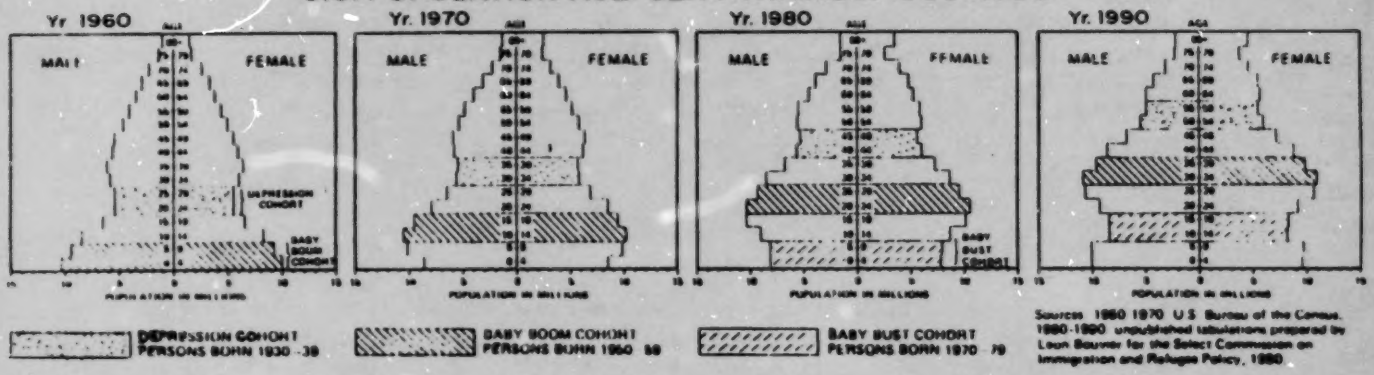
Nationally there has been a reversal of the traditional movement from the farm to the city. Since 1970 people have been moving away from the city to rural and small town areas. In addition, there has been a movement to the southern and western regions of the country so that now more than half of the population lives in those regions. Central city population has declined as more people move to the suburbs. The proportion of total central city minority population is expanding.

The United States in the 1980s will have a more mature workforce. With the bulk of the baby boom generation moving beyond the job-entry stage, pressure on the job market from new entrants is expected to taper off.

College facilities, expanded in the 1960s and early 1970s, are now too abundant for the current school-age generation. College enrollment will decline in the 1980s.

The tables below show how the depression, the baby boom, and the baby bust affect the population statistics.

U.S. POPULATION AGE-SEX PYRAMIDS: 1960-1990



Source: 1960 1970 U.S. Bureau of the Census. 1980-1990 unpublished tabulations prepared by Leon Bouvier for the Select Commission on Immigration and Refugee Policy, 1980.

[1] Condensed from a briefing by five population experts before the Congressional Advisory Committees to the President's Commission for a National Agenda for the Eighties, July 29, 1980.

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STATE AND LOCAL POPULATION TRENDS

The State of Wisconsin population reflects national trends. Milwaukee County (and therefore the MATC District) has lost population while rural and suburban counties have gained population.

The minority population in Wisconsin is still concentrated in Milwaukee County with four out of every five blacks (149,877 in the MATC District), and one out of every five American Indians (5,956 in the MATC District in 1980) living in the MATC District. The number of minorities in the MATC District is continuing to increase. These two population trends, declining total population and increasing minority population, have important implications for long-range planning in the District.

DISTRICT POPULATION AND PROJECTIONS

The MATC District is composed of the entire population of Milwaukee County (964,988), approximately 96% of the population of Ozaukee County (64,302), 18% of the population of Washington County (15,273), and 0.8% of the population of Waukesha County (2,243). The total District population as of the 1980 census was 1,046,806. That total has been updated and revised to an estimated 1,028,535 in 1985.

Table 1 shows the 1983 updated population projections by age for the District based upon State of Wisconsin projections of 1980 census data. Additional information is graphically displayed in Figure 1. An examination of the Table shows that there will be an increase in the 25-34 age group from 174,772 in 1980 to 189,883 in 1985 followed by a leveling off at around 185,000 until 1990. There will be a steady increase in the 35-44 age group for the rest of the century (from 104,587 in 1980 to 162,297 in 2000). The 18-24 age group will show a decrease from 144,233 in 1980 to 92,309 twenty years later. The median age of the MATC District will increase from 31.46 in 1984 to 36.03 in 2000.

PROBLEMS IN COMPARING 1970 AND 1980 CENSUS DATA FOR MINORITIES

The Bureau of the Census made efforts in the 1980 census to improve its minority population enumeration. Therefore, the rate of undercount for minorities has lessened from the 1970 to 1980 census. One of the factors contributing to an apparent increase in minority population is this improved minority population enumeration.

The racial classification differences between the 1970 and 1980 censuses constitute another factor affecting minority population enumeration. Many Spanish-origin persons classified themselves as white in 1970 but as "other" in 1980. In addition, more American Indians were likely to identify themselves as Indian in 1980 than in 1970. Asian Indians were classified as white in 1970 and as non-white in 1980. These factors have to be considered when examining the 55% increase in minority population in the District (from 114,331 to 177,304).

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TABLE 1

MATC DISTRICT
POPULATION PROJECTIONS

AGE	1980	1984	1985	1986	1987	1988	1989	1990	1995	2000
0-17	282,770	267,330	263,470	262,948	262,426	261,904	261,383	260,861	261,726	257,915
18-24	144,233	127,977	123,913	119,678	115,444	111,209	106,975	102,740	91,964	92,309
25-34	174,772	186,861	189,883	188,735	187,586	186,438	185,289	184,141	159,766	137,565
35-44	104,587	118,606	122,111	126,941	131,770	136,600	141,429	146,259	162,295	162,297
45-59	163,648	149,084	145,443	143,696	141,949	140,202	138,455	136,708	150,729	177,752
OVER 59	176,794	182,331	183,715	184,502	185,289	186,076	186,863	187,650	184,966	181,032
TOTAL	1,046,804	1,032,189	1,028,535	1,026,500	1,024,465	1,022,429	1,020,394	1,018,359	1,011,446	1,008,870
Median Age	31.52	31.46	31.68	31.92	32.16	32.41	32.66	32.91	34.52	36.0

SOURCE: Calculated by the MATC Office of Research, Planning and Development from information supplied by the State of Wisconsin Board of Vocational, Technical & Adult Education. 9/25/84
This information is based upon 1980 Census data.

TABLE 2

COMPONENTS OF POPULATION CHANGE FOR WISCONSIN, THE MATC DISTRICT, AND MINORITIES WITHIN THE MATC DISTRICT

	Final Census 1970	Final Census 1980	Natural Increase	Net Migration	Total Change
Wisconsin	4,417,821	4,705,335	277,600	9,914	287,514
MATC District (Total)	1,119,874	1,046,806	66,130	-139,198	-73,068
(Black)	106,131	149,877	27,334	16,411	43,745
(American Indian)	3,789	5,956	890	1,278	2,168
(Other Non-White)	4,411	21,471	791	16,269	17,060

Source: Kale, Naylor, McAusland; Wisconsin's Minority Population: Changes in Size, and Distribution. Paper presented at the Conference on Current Trends in Wisconsin's Population, Milwaukee, May 7, 1981.

POPULATION BY INCOME

Standard economic areas were used for the purpose of analyzing the MATC District population by income. The sixteen economic areas are shown in Figure 2 and incomes for those areas are tabulated in Table 3. The diversity of income in the District can be seen on these Tables. For example, 52.1% of the Central City, 44.4% of the Near West, and 39.7% of the Inner City households make less than $10,000; whereas, 6.7% of the Southwest End, 8.9% of Ozaukee County, and 4.7% of the North Shore households make less than $10,000. On the high end, 53.3% of the North Shore, 36.5% of Ozaukee County, and 41.6% of the Southwest End households make over $35,000, while only 6.4% of the Near West, and 10% of the Near South households make over $35,000. From October of 1982 to October of 1983, the percent of households in the MATC District with incomes below $10,000 increased from 16.8% to 17.1%, while the percent of households making over $35,000 increased from 17.1% to 20.5%. This spread is continuing to increase. In October of 1984, the percent of households in the MATC District with incomes below $10,000 increased to 18.6% and the percent of households with incomes over $35,000 increased to 22.5%.

FIGURE 1

ACTUAL AND PROJECTED POPULATION BY AGE

MATC DISTRICT

1980-2000

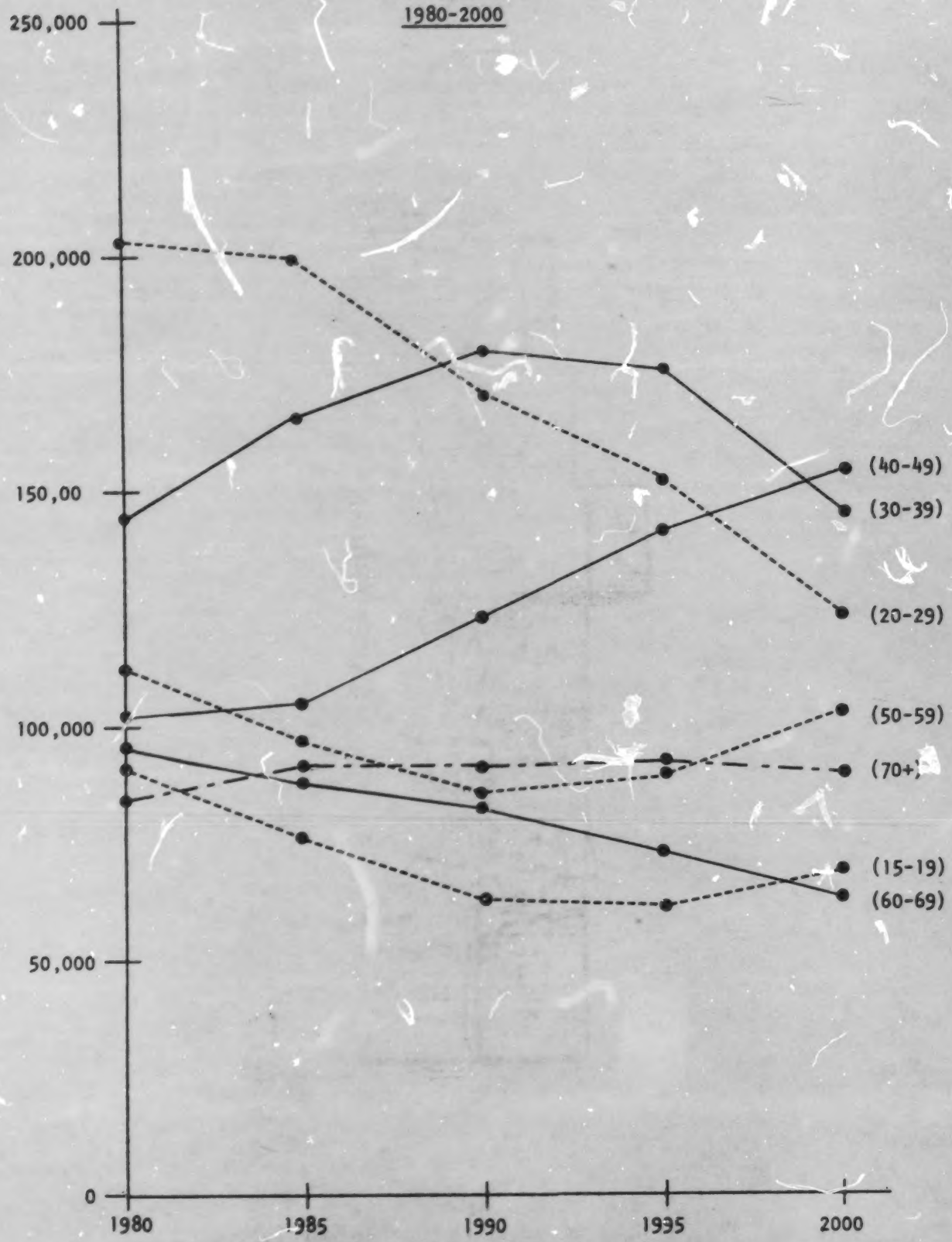

FIGURE 2

MATC DISTRICT

(16 Statistical Areas Used in Table 3)

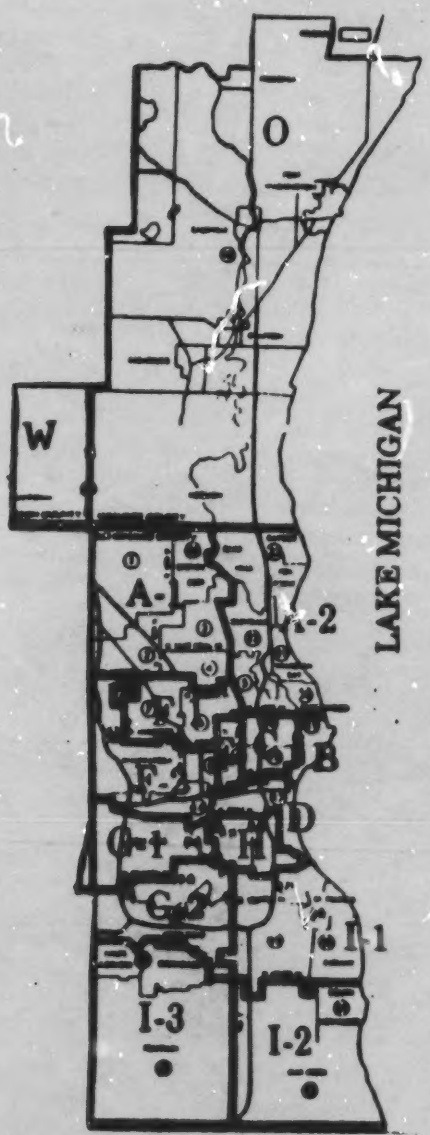

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TABLE 3

Yearly Family Income Before Taxes

Percent of Households by Income Brackets in
Statistical Areas in the MATC District
April 1985

Area		Total Households	Under $5,000 %	$5,000-$9,999 %	$10,000-$14,999 %	$15,000-$19,999 %	$20,000-$24,999 %	$25,000-$34,999 %	$35,000-$49,999 %	$50,000- and Over %
A-1	Northwest End	46,790	3.3%	9.7%	11.6%	13.2%	16.4%	23.9%	13.5%	8.4%
A-2	North Shore	22,050	.7%	4.0%	7.4%	5.5%	11.4%	17.7%	22.8%	30.5%
B-11	East Side	12,510	5.2%	11.0%	18.8%	15.2%	12.6%	15.7%	12.6%	8.9%
C	Inner City	30,470	15.6%	24.1%	17.0%	10.3%	11.6%	12.1%	7.1%	2.2%
D-13	Central City	7,880	18.8%	33.3%	8.7%	4.4%	8.7%	15.9%	2.9%	7.3%
E-9	Near West	16,820	18.6%	25.8%	17.7%	12.9%	9.7%	8.9%	4.8%	1.6%
F-1	Capitol Court	37,890	4.1%	10.2%	12.7%	13.1%	14.0%	22.8%	16.1%	7.0%
F-2	Mayfair	34,710	4.1%	8.4%	11.8%	12.7%	14.7%	21.5%	15.9%	10.9%
G-1	26 West Allis, West Milwaukee and Part of Waukesha County	28,110	1.9%	12.2%	18.4%	13.8%	12.2%	24.2%	12.0%	5.3%
G-2	Southwest	30,770	2.2%	6.5%	11.5%	14.2%	15.7%	25.7%	18.6%	5.7%
H	Near South	29,100	8.8%	23.3%	15.3%	14.9%	12.6%	15.3%	8.0%	2.0%
I-1	Southeast	38,040	4.6%	12.8%	13.4%	11.8%	14.3%	24.5%	12.8%	5.8%
I-2	31-32 South Milwaukee, Oak Creek	13,370	3.3%	8.3%	16.6%	9.9%	15.5%	16.6%	19.3%	5.5%
I-3	Southwest End	14,030	1.8%	4.9%	9.0%	9.0%	9.0%	24.7%	22.3%	19.3%
O	Ozaukee County (MATC's Portion)	22,080	2.9%	6.0%	10.1%	9.2%	10.9%	24.4%	20.4%	16.1%
W	Washington County (MATC's Portion)	5,130	3.6%	5.2%	10.5%	10.1%	13.7%	31.0%	19.0%	6.9%
	TOTAL	395,750	6.3%	12.3%	13.3%	11.9%	13.2%	20.5%	14.1%	8.4%

Source: Calculated by MATC's Department of Research, Planning, and Development from information in The Milwaukee Journal Consumer Analysis, 1985.

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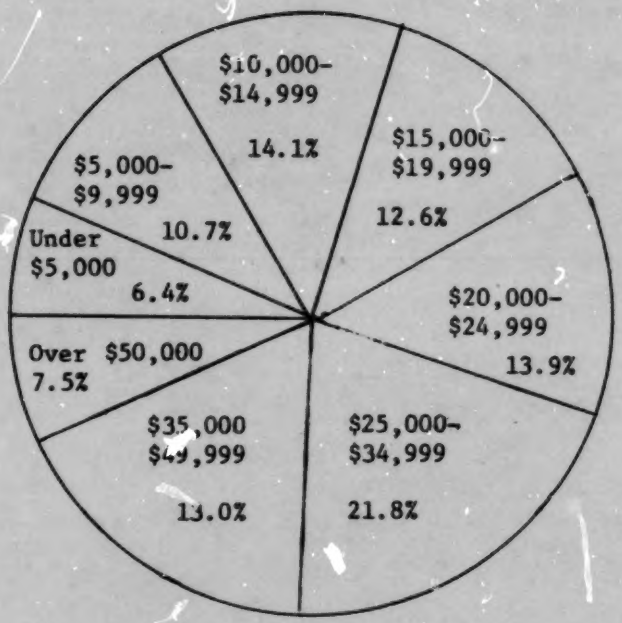
FIGURE 3

YEARLY FAMILY INCOME BEFORE TAXES

Percent of Households by Income Brackets in the MATC District

October 1983



	Total	Under $5,000	$5,000-$9,999	$10,000-$14,999	$15,000-$19,999	$20,000-$24,999	$25,000-$34,999	$35,000-$49,999	Over $50,000
Number of Households	394,142	25,364	42,120	55,392	49,819	54,883	85,952	51,418	29,194
Percent of Total	100%	6.4%	10.7%	14.1%	12.6%	13.9%	21.8%	13.0%	7.5%

Source: Calculated by District Office of Research, Planning, and Development based upon The Milwaukee Journal Consumer Analysis, 1984.

POPULATION AND EMPLOYMENT

Table 4 shows labor force and employment information by sex and minority status for the Standard Metropolitan Statistical Area (Milwaukee, Ozaukee, Washington, and Waukesha Counties). This Table is based upon information supplied by the Wisconsin Department of Industry, Labor and Human Relations Job Service. The unemployment rate for Blacks and Hispanics is greater than that of Asian, Whites and Native Americans. Male unemployment rate is highest for Blacks (15.7%) and lowest for Asians (4.3%). Female unemployment is highest for Blacks (11.6%) and lowest for Whites (3.9%).

POPULATION BY COMMUNITY

Table 5 shows the population of Milwaukee, Ozaukee, Washington, and Waukesha Counties in 1970 and 1980 showing the percent change for each county. The 1970 and 1980 populations and percent changes are also shown for the communities in Milwaukee and Ozaukee Counties. Figure 4 shows the population increase and decrease for the communities in the MATC District.

The population increased in sixteen communities in the District and decreased in 17 communities. The communities with large percent increases were Saukville Village (+151.6%), Cedarburg Town (+40.0%), Grafton Village (+39.7%), and Mequon City (+33.2%) in Ozaukee County, and Franklin City (+37.7%) in Milwaukee County. The communities with the largest percent decreases were West Milwaukee Village (-19.7%), Whitefish Bay (-14.27), Cudahy City (-11.4%), and Milwaukee City (-11.3%) in Milwaukee County, and Belgium Town (-12.8%) in Ozaukee County.

EDUCATIONAL LEVEL OF ADULTS

The educational level of adults in the MATC District is shown in Table 6. About 31% or 190,000 MATC District residents 25 years and older have not completed high school. Sixteen percent (99,000) have no high school education. Forty-seven percent (30,000) of the black residents of the District have not completed high school and 21% (13,000) have had no high school education. The majority (55% or 6,400) of MATC Hispanic residents have not completed high school. Forty percent (4,600) have had no high school education. The highest numbers and percentage of residents of the District who have no high school education (93,256), or did not complete high school (130,584) are concentrated in Milwaukee County and the City of Milwaukee. All municipalities in the District have significant numbers of residents who either have not completed high school or have no high school education at all.

TABLE 4

LABOR FORCE STATUS BY SEX AND RACE (16 Years and Over)

1980
Milwaukee
Standard Metropolitan Statistical Area

Race	Sex	Total Labor Force	Unemployment Rate	Not In Labor Force
White	Male	358,115	5.2%	91,792
White	Female	271,090	3.9%	224,979
Black	Male	29,267	15.7%	12,490
Black	Female	28,932	11.6%	22,566
American Indian	Male	1,841	5.4%	629
American Indian	Female	1,666	7.1%	1,313
Asian & Pacific Islander	Male	2,112	4.3%	654
Asian & Pacific Islander	Female	1,847	6.8%	1,546
Spanish Origin	Male	8,433	9.9%	2,264
Spanish Origin	Female	5,328	7.9%	4,622

Source: "Wisconsin Economic Planning Information - 1983," Wisconsin Job Service 1983.

TABLE 5

POPULATION BY COMMUNITY

1970-1980

Counties	Population 1970	Population 1980	Percent Change
Milwaukee County	1,054,249	964,988	-8.4%
Ozaukee County	54,461	66,981	+22.9%
Washington County	63,839	84,848	+32.9%
Waukesha County	231,338	280,326	+21.1%
Communities			
Milwaukee City	717,372	636,210	-11.3%
Bayside Village	4,461	4,612	+3.3%
Brown Deer Village	12,582	12,921	+2.6%
Cudahy City	22,078	19,547	-11.4%
Fox Point Village	7,939	7,649	-3.6%
Franklin City	12,247	16,871	+37.7%
Glendale City	13,426	13,882	+3.3%
Greendale Village	15,089	16,928	+12.1%
Greenfield City	24,424	31,467	+28.8%
Hales Corners Village	7,771	7,110	-8.5%
Oak Creek City	13,928	16,932	+21.5%
River Hills Village	1,561	1,642	+5.1%
St. Francis City	10,489	10,066	-4.0%
Shorewood Village	15,576	14,327	-8.0%
South Milwaukee City	23,297	21,069	-9.5%
Wauwatosa City	58,676	51,308	-12.5%
West Allis City	71,649	63,982	-10.7%
West Milwaukee Village	4,405	3,535	-19.7%
Whitefish Bay	17,402	14,930	-14.2%
Bayside Village (Ozaukee)	123	112	-8.9%
Belgium Town	1,625	1,424	-12.4%
Belgium Village	809	892	+10.3%
Cedarburg City	7,697	9,005	+17.0%
Cedarburg Town	3,774	5,244	+40.0%
Fredonia Town	1,746	2,144	+22.8%
Fredonia Village	1,045	1,437	+37.5%
Grafton Town	3,127	3,588	+14.7%
Grafton Village	5,998	8,381	+39.7%
Mequon City (Ozaukee)	12,150	16,193	+33.2%
Port Washington City	8,752	8,612	-1.6%
Port Washington Town	1,528	1,436	-6.0%
Saukville Town	1,516	1,583	+4.4%
Saukville Village	1,389	3,494	+151.6%
Thiensville Village	3,182	3,341	+5.0%

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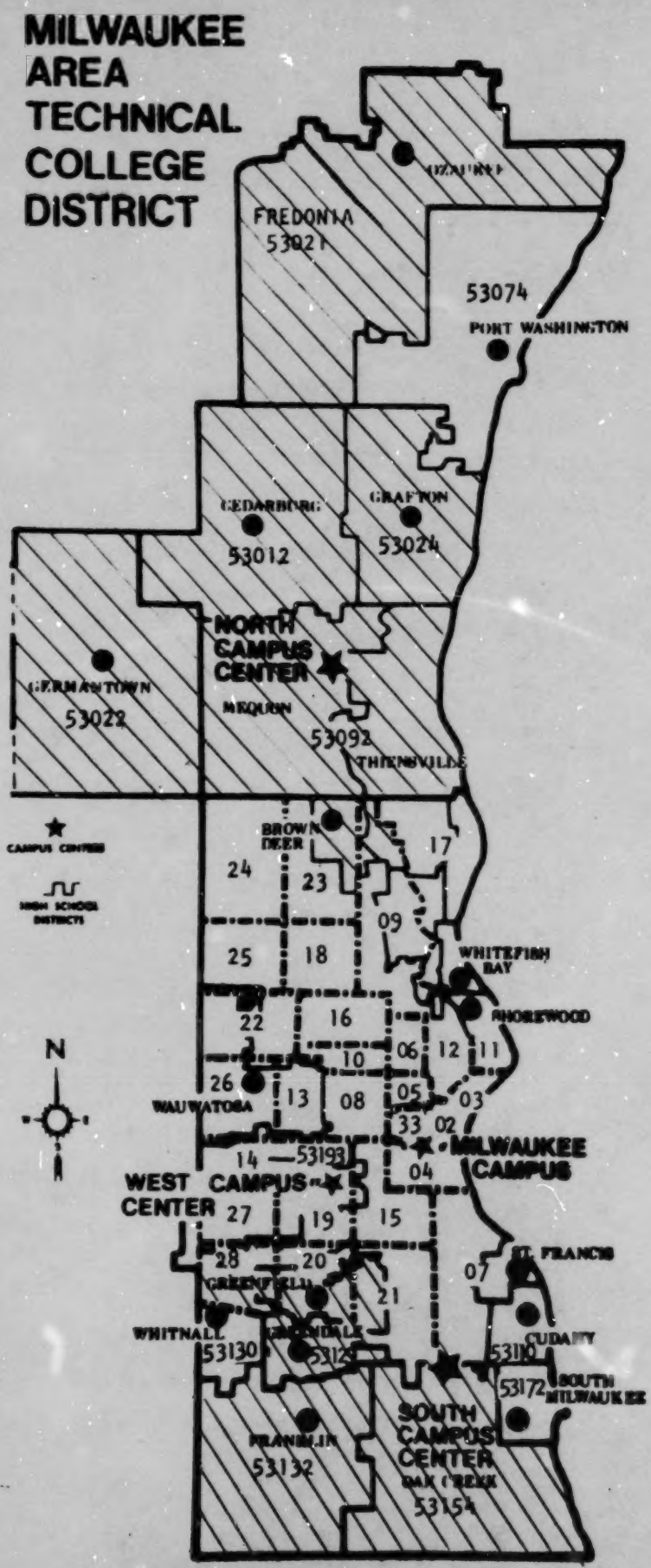

FIGURE 4

Population Change in the MATC District from 1970 to 1980

Population Decrease

Population Increase

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TABLE 6

MATC DISTRICT

Persons 25 Years and Over by Race, by Years of School Completed

	Elem	H.S. 1-3 Yrs.	H.S. 4 Yrs.	College 1-3 Yrs.	College 4 or More Years	Total District
Total	99,474	91,639	233,066	96,651	100,328	621,158
% Total District	16.01%	14.76%	37.52%	15.56%	16.15%	
White	83,256	73,205	210,111	85,629	93,780	545,981
% Total District	15.25%	13.41%	38.48%	15.68%	17.18%	
Black	13,297	16,664	20,202	9,361	4,515	64,039
% Total District	20.76%	26.02%	31.55%	14.62%	7.05%	
Spanish Origin	4,611	1,848	2,787	1,338	1,076	11,660
% Total District	39.55%	15.85%	23.90%	11.47%	9.23%	

Source: 1980 Census Data.

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CHAPTER III

ANALYSIS OF HIGH SCHOOL GRADUATES AND POSTSECONDARY SCHOOLS IN THE MATC DISTRICT

HIGH SCHOOL GRADUATES

The number of high school graduates in the MATC District is expected to increase from 12,000 to 13,000 over the next four years (see Tables 1 and 2). The number of high school graduates attending MATC the fall semester after graduating decreased from 1,055 in 1982 to 773 in 1984. This was a decrease from 7.79% to 6.15% of each graduating class. Both West Division and Pulaski had over 9% of their 1984 graduates enroll at MATC. Overall, both the Milwaukee Public Schools and Parochial Schools sent slightly less than 6% of their 1984 graduating classes to MATC. The suburban public schools sent 6.59% of their 1984 graduates to MATC with St. Francis (15.87%), West Allis-West Milwaukee (12.68%), South Milwaukee (12.14%), and Cudahy (11.96%) being the highest.

TRANSFER FROM OTHER POSTSECONDARY SCHOOLS

Graduates coming to MATC directly after high school graduation make up only a portion of the MATC market. Many students attend MATC either full or part time after entering the work force. In addition, many students transfer to MATC after attending other post-high school institutions. During the 1982-83 school year 15% of the Associate Degree (2,920 of 20,162), 16% of the College Parallel (597 of 3,744), and 13% of the total enrollment (10,518 of 79,396) attended other post-high school institutions before attending MATC. Table 5 lists the schools that MATC students have transferred from and shows which category they enrolled in at MATC.

ENROLLMENT IN COLLEGES AND UNIVERSITIES

As shown in Table 5, MATC has the largest enrollment of postsecondary institutions in the MATC District (40,919 of the total postsecondary enrollment of 88,361, or 46%). However, the University of Wisconsin-Milwaukee has several thousand more full-time equivalent students than the approximately 14,000 enrolled at MATC. Caution must be used when comparing enrollments in Table 6 because they are not expressed in full-time equivalents.

PRIVATE TRADE AND VOCATIONAL SCHOOLS AND TRAINING IN BUSINESS AND INDUSTRY

There are 43 trade and vocational schools in the MATC District. This constitutes 56% of the private vocational and trade schools in Wisconsin. There are four private cosmetology schools, seven private real estate schools and eight private Radiologic Technology schools in the District.

A brief survey of training offices in business and industry indicated that most of the firms that conducted training contract some of it to either schools or consultants. Many of the firms use the services of MATC either formally or informally.

TABLE 1

NUMBER OF PUBLIC HIGH SCHOOL GRADUATES

1979-1988

High School	Number of Graduates						Projected Number of Graduates			
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Cudahy	325	309	322	319	330	326	266	286	251	293
Franklin	215	217	205	209	223	198	190	198	204	208
Greendale	360	400	357	348	372	306	294	274	278	311
Greenfield	383	380	350	349	347	306	286	283	267	296
Oak Creek	347	335	333	353	334	325	272	279	286	334
St. Francis	144	145	138	108	107	126	95	103	102	87
South Milwaukee	380	338	409	352	334	313	310	295	311	324
Whitnall (Hales Corners)	257	245	225	245	202	181	180	173	143	165
Wauwatosa East	371	378	356	359	339	295	294	316	331	354
Wauwatosa West	354	328	304	280	246	259	212	247	237	208
West Allis-Central	398	390	375	328	311	284	287	309	326	329
West Allis-Nathan Hale	431	380	371	341	285	301	255	285	270	292
West Allis-West Milwaukee	155	151	144	135	136	142	145	137	121	142
Brown Deer	258	271	211	268	222	210	191	181	165	177
Nicolet	522	471	460	428	443	398	410	390	413	428
Shorewood	188	204	166	184	184	214	190	165	174	165
Whitefish Bay	296	293	278	268	239	266	242	222	226	272
Cedarburg	331	319	314	300	300	259	278	270	289	281
Grafton	235	240	245	260	210	230	224	234	197	247
Homestead (Thiensville-Mequon)	389	371	338	331	307	316	341	322	324	325
Ozaukee	85	75	81	68	80	75	83	92	72	91
Port Washington	263	267	230	248	270	257	250	260	220	225
Washington (Germantown)	286	268	267	255	270	269	287	261	267	256
TOTAL	6,973	6,775	6,479	6,336	6,091	5,856	5,582	5,582	5,474	5,830
Milwaukee Public Schools	5,549	5,200	4,704	4,966	4,607	4,756	4,293	4,590	4,592	4,861
TOTAL PUBLIC HIGH SCHOOL GRADUATES	12,522	11,975	11,183	11,302	10,698	10,612	9,875	10,172	10,066	10,691

NOTE: About 5% of the district school population drop out of school each year. This amounts to more than 1,000 high school dropouts each year, and in some years as many as 2,000.

*Number of Milwaukee Public High School graduates is estimated based on 10% decrease of students each year by class. Enrollment in Fall of 1984 was as follows: Seniors, 4,770; Juniors, 5,738; Sophomores, 6,560; Freshmen, 8,102.

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TABLE 2

NUMBER OF PAROCHIAL AND PRIVATE HIGH SCHOOL GRADUATES

1979-1988

High School	Number of Graduates						Projected Number of Graduates			
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Parochial										
Heritage Christian School			19	12	14	11	16	14	27	28
Martin Luther	103	104	109	115	131	139	116	106	127	131
Messmer High School							44	37	37	27
Milwaukee Lutheran	242	228	210	240	215	218	203	208	227	256
Milwaukee County Catholic Archdiocesan Schools	1,749	1,703	1,748	1,807	1,651	1,668	1,624	1,489	1,493	1,730
YCY Central			12	16	8	10	4	9	10	12
Wisconsin Lutheran	271	230	225	202	194	205	213	215	231	277
Total Parochial	2,365	2,265	2,323	2,392	2,213	2,251	2,220	2,078	2,152	2,461
Private										
University School			82	65	80	75	67	81	64	80
TOTAL PUBLIC, PAROCHIAL, AND PRIVATE HIGH SCHOOL GRADUATES	14,887	14,240	13,588	13,759	12,991	12,938	12,162	12,331	12,282	13,232

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TABLE 3

PERCENT OF PUBLIC AND PAROCHIAL HIGH SCHOOL GRADUATES
ATTENDING MATC DAY SCHOOL IMMEDIATELY
AFTER GRADUATION - 1982-1984

High School	1982			1983			1984		
	Graduates	Attending MATC	Percent	Graduates	Attending MATC	Percent	Graduates	Attending MATC	Percent
PUBLIC HIGH SCHOOLS - District									
Cudahy	319	38	11.91	330	38	11.52	326	39	11.96
Franklin	209	17	8.13	223	13	5.83	198	7	3.54
Greendale	348	27	7.76	372	17	4.57	306	12	3.92
Greenfield	349	37	10.60	347	18	5.19	306	29	9.48
Oak Creek	[illegible]	34	9.63	334	35	10.48	325	26	8.00
St. Francis	106	19	17.59	107	17	15.89	126	20	15.87
South Milwaukee	352	41	11.65	334	29	8.68	313	38	12.14
Whitnall (Hales Corners)	245	17	6.94	202	15	7.43	181	15	8.29
Wauwatosa East	359	32	8.91	339	14	4.13	295	9	3.05
Wauwatosa West	280	24	8.57	246	20	8.13	259	14	5.41
West Allis-Central	328	31	9.45	311	48	15.43	284	20	7.04
West Allis-Nathan Hale	341	28	8.21	285	28	9.82	301	17	5.65
West Allis-West Milwaukee	135	20	14.81	136	21	15.44	142	18	12.68
Brown Deer	268	7	2.61	222	1	0.45	210	2	0.95
Nicolet	428	7	1.64	443	12	2.71	398	13	3.27
Shorewood	184	4	2.17	184	5	2.72	214	6	2.80
Whitefish Bay	268	6	2.24	239	7	2.93	266	11	4.14
Cedarburg	300	33	11.00	300	37	12.33	259	20	7.72
Grafton	260	32	12.31	210	16	7.62	230	14	6.09
Homestead (Thiensville-Mequon)	331	12	3.63	307	10	3.26	316	22	6.96
Ozaukee (Fredonia)	68	7	10.29	80	7	8.75	75	7	9.33
Port Washington	248	26	10.48	270	17	6.30	257	12	4.67
Washington (Germantown)	255	17	6.67	270	11	4.07	269	15	5.58
Total District High Schools	6,336	516	8.14	6,091	436	7.16	5,856	386	6.59

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TABLE 3 (Cont.)

Percent of Public and Parochial High School Graduates Attending MATC Day School Immediately after Graduation 1982-1984

High School	1982 Graduates	1982 Attending MATC	1982 Percent	1983 Graduates	1983 Attending MATC	1983 Percent	1984 Graduates	1984 Attending MATC	1984 Percent
PUBLIC SCHOOLS - City of Milwaukee									
Bay View	437	30	6.86	NA	29		379	26	6.86
Custer	350	32	9.14	NA	31		377	22	5.84
Hamilton	406	35	8.62	NA	34		343	24	7.00
Juneau	157	6	3.82	NA	9		148	3	2.03
King	145	10	6.90	NA	5		234	8	3.42
Madison	480	50	10.42	NA	32		375	25	6.67
Marshall	482	43	8.92	NA	27		358	18	5.03
Milwaukee Tech	516	50	9.69	NA	36		415	32	7.71
North Division	145	10	6.90	NA	7		171	11	6.43
Pulaski	413	32	7.75	NA	39		410	37	9.02
Riverside	184	3	1.63	NA	9		154	6	3.90
South Division	376	28	7.45	NA	17		364	27	7.42
Vincent	336			NA			364		
Washington	268	31	11.57	NA	27		258	7	2.71
West Division/Arts	94	7	7.45	NA	7		127	12	9.45
Total City of Milwaukee Public High Schools	4,789*	367	7.66	4,607*	309	6.71	4,477*	258	5.76
PAROCHIAL HIGH SCHOOLS									
Martin Luther	115	21	18.26	131	11	8.40	139	8	5.76
Milwaukee Lutheran	240	19	7.92	215	21	9.77	218	12	5.50
Milwaukee County Catholic Archdiocesan Schools	1,807	115	6.36	1,651	101	6.12	1,668	96	5.76
Wisconsin Lutheran	202	27	13.37	194	25	12.89	205	13	6.34
Total Parochial High Schools	2,364	182	7.70	2,191	158	7.21	2,230	129	5.78
TOTAL PUBLIC AND PAROCHIAL HIGH SCHOOL GRADUATES	13,489	1,065	7.90	12,889	903	7.01	12,563	773	6.15

*Total City of Milwaukee Public High Schools does not include GED or alternate high school graduates.

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TABLE 4

INSTITUTION PREVIOUSLY ATTENDED
1982-1983

SCHOOLS	ASSOC DEGREE	VIP/ CROSSOVER	COLLEGE PARALLEL	CERT & DIPLOMA	HIGH SCHOOL	ABE/ CETA	APPREN-TICE	OTHER	TOTAL
STATE VTAE SCHOOLS	326	7	59	119	10	5	29	448	1003
UW-MADISON	147		22	58	2		5	423	657
UW-MILWAUKEE	819	28	177	293	24	6	23	1261	2621
UW-CENTERS	89	3	14	20	2		4	100	232
UW-EAU CLAIRE	36	1	8	12	2	1	1	60	121
UW-LA CROSSE	35	2	8	14				53	112
UW-OSHKOSH	51	5	11	24			4	89	184
UW-PLATTEVILLE	32	2	5	6		1	3	27	76
UW-RIVER FALLS	8			6				6	20
UW-STEVENS POINT	65	2	13	19			3	87	189
UW-STOUT	51	1	6	15			6	62	141
UW-SUPERIOR	5						1	6	12
UW-WHITEWATER	75	4	20	39			4	156	298
COUNTY TEACHER'S COLLEGES	1							1	2
ALVERNO	30	2	14	10	2		2	66	126
CARDINAL STRITCH	18	1	4	6	1			44	74
LAYTON SCHOOL OF ART	4		1	2			1	13	21
MARQUETTE UNIVERSITY	121	3	25	54	2		3	451	659
MILW SCHOOL OF ENGINEERING	81		16	29	1	4	8	142	281
MOUNT MARY	25		7	9			1	75	117
OTHER PRIVATE COLLEGES	83	6	23	33	6	3	2	168	324
PRIVATE BUSINESS & TRADE	145	16	23	63	6	7	6	210	476
COSMETOLOGY SCHOOLS	21	5	2	16	3	1	2	55	105
HEALTH OCCUPATIONAL SCHOOLS	30		19	6	4			63	122
OUT-OF-STATE COLLEGES AND UNIVERSITIES	486	36	94	219	28	21	19	983	1886
OUT-OF-STATE BUSINESS AND TRADE SCHOOLS	42	7	7	43	3	8	5	142	257
OTHERS NOT CLASSIFIED	94	3	15	63	2	5	8	212	402
TOTALS	2920	134	593	1168	98	62	140	5403	10518

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TABLE 5

POSTSECONDARY EDUCATION

COLLEGES IN THE MATC DISTRICT

Institution	Type	Enrollment Fall 1983	Enrollment Fall 1971	Percent Change	Program
Alverno College	Liberal Arts College	1,438	1,097	+31%	Liberal Arts, Nursing Education (including Associate Degree)
Columbia Hospital - Carroll College					Nursing
Cardinal Stritch College	Liberal Arts College	1,763	833	+112%	Liberal Arts/Professional Masters Degrees; Nursing LPN, ADN, BS
Concordia College	Liberal Arts College	763	330	+131%	Liberal Arts, Business (including Associate Degree), Nursing BS
Marquette University	University	11,707	10,235	+14%	Liberal Arts, Engineering, Business Administration, Journalism, Nursing, Law, Dentistry, Speech, Physical Therapy (including Associate Degree)
Medical College of Wisconsin	Professional	872	474	+84%	Medical and Nursing ADN, BS, MS
Milwaukee Area Technical College	VTAE	40,919	33,215	+23%	Vocational, Technical, and Adult Education
Milwaukee School of Engineering	Technical	2,649	2,027	+31%	Industrial, Technical, and Professional (including Associate Degree)

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TABLE 5

(Continued)

Institution	Type	Enrollment Fall 1983	Enrollment Fall 1971	Percent Change	Program
Mount Mary College	Liberal Arts College	1,144	753	+52%	Liberal Arts, Teacher Ed, Med Tech, Business, Social Work, Fashion Design, Home Economics
Sacred Heart School of Theology	Theological	110	81	+36%	Seminary
St. Francis School of Pastoral Ministry	Theological	89	165	-46%	Theology
St. Luke School of P. N.	Practical Nursing				Practical Nursing
University of Wisconsin-Milwaukee	University	26,468	22,277	+19%	Liberal Arts, Engineering, Architecture, Education, Fine Arts, Nursing, Library Science, Social Welfare
Wisconsin Conservatory of Music	Professional	98	82	+20%	Music
Wisconsin Lutheran Seminary	Theological	233	202	+15%	Theology
Wisconsin Lutheran College	Liberal Arts College	108	NA	NA	Liberal Arts

Source: "The Thirteenth Annual Report of Opening Fall Enrollment in Wisconsin Institutions of Higher Education for the Academic Year 1983-84, Wisconsin Association of Collegiate Registrars and Admissions Officers.

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TABLE 6

TRADE AND VOCATIONAL SCHOOLS IN THE MATC DISTRICT

School	Programs
Aerodine, Inc.	Aeronautics
American Beauty Colleges	Cosmetology
Bartenders Professional School of Milwaukee	Bartending
Rosemary Bishoff Studios	Modeling, Voice
Broadcast Services Institute	Radio and TV Broadcasting
City College of Cosmetology	Cosmetology
Columbia Hospital	Radiologic Technology
Deaconess Hospital School of Nursing	Nursing (Diploma)
Edward's Co-Ed Beauty College, Inc.	Beauty Culture
Family Hospital School of Radiologic Tech.	X-Ray Technologist
Good Samaritan Medical Center, School of Radiologic Technology	X-Ray Technologist
Gran-Aire, Inc.	Aeronautics
Herzing Institutes, Inc.	Medical Assistant, Medical Lab Tech, Medical Secretarial
IBA Prestige Beauty Colleges	Cosmetology
Institute of Broadcast Arts	FCC Licenses, Radio and TV Broadcasting
Manpower Business Training Institute	Data Processing, Key Punch, Secretarial
Milwaukee Center for Photography	Photography
Milwaukee County Medical Complex	Nursing (Diploma)
Milwaukee County Medical Complex	Radiologic Technician
Milwaukee College of Beauty Culture, Inc.	Beauty Culture
Milwaukee Graphic Arts Institute	Printing
Milwaukee School of Real Estate	Real Estate
Milwaukee Stratton College	Accounting, Bookkeeping, Business, FCC Licenses, Secretarial
Mitchell Aero	Aeronautics
John Robert Powers Modeling and Finishing School	Modeling
Professional Bartending School of Wisconsin, Inc.	Bartending
Bernie Robbins School of Real Estate	Real Estate
Robedeaux Real Estate School	Real Estate
St. Francis Hospital	Medical Sonography
St. Luke's Hospital School of Practical Nursing	Practical Nursing
St. Luke's Hospital School of Radiologic Technology	X-Ray Technologist
St. Mary's School of Radiologic Technology	X-Ray Technologist
St. Michael's Hospital	Radiologic Technology
Spencerian School of Real Estate, Inc.	Real Estate
Stenotech of Milwaukee	Court Reporting, Speedwriting
Patricia Stevens Career College	Fashion Merchandising, Secretarial (Executive)
Travel Tech, Inc.	Travel Agent
Universal Academy of Hair Design	Cosmetology, Hair Styling

TABLE 6

(Continued)

School	Programs
Veterans Administration	Radiologic Technology
Wauwatosa Institute of Real Estate	Real Estate
Westfahl School of Real Estate, Inc.	Real Estate
Wisconsin Institute of Locksmithing	Locksmithing
Wisconsin School of Real Estate	Real Estate

Source: American Trade Schools Directory.

CHAPTER IV

ANALYSIS AND PROJECTION OF MATC ENROLLMENTS
Headcount Analysis and Projections

Historical Fall headcount and annual full-time equivalent enrollments are shown in Table 1 from 1977-78 to the 1984-85 school year. Some changes in enrollments that have occurred during this period are as follows:

1. Day and evening Fall headcount enrollment declined 5.8% from 40,919 in 1983 to 38,552 in 1984. Day enrollments at all MATC Campuses have steadily increased from 1973 to 1983 with a decline in 1984. Evening enrollments have been lower since 1974 because of decreasing enrollment at evening centers.

2. Associate Degree Fall headcount enrollments increased 54% from 9,468 in 1976 to 14,621 in 1983, but have decreased to 14,064 in 1984.

3. College Parallel headcount decreased 36% from 3,696 in 1976 to 2,370 in 1983 and has stabilized at 2,387 in 1984.

4. Diploma, Certificate enrollments have decreased 1,083, about 23%, to a record low of 4,442 in 1984.

5. General Adult, Occupational Adult, and Adult Avocational enrollments peaked in 1974 and have declined since then because of the initiation of tuition in 1975-76.

6. Apprentice enrollments fluctuate as changes in the economy occur. Enrollment has declined in the last three years, but has increased in 1984. Part of the 1983 decline is due to a change in course numbering initiated in 1983. Non-Apprentice students taking apprentice courses are no longer coded as apprentice students.

7. Adult High School enrollments had been fairly stable from 1973 to 1981 in the 1,100 to 1,200 range. The enrollment has dropped to 931 in 1984.

8. Homemaking enrollments decreased by more than 50% from 5,169 in 1973 to 2,574 in 1976 because of tuition charges started in 1975. Since 1976, Homemaking enrollments have increased somewhat to 3,298 in 1981 and declined slightly to 3,117 in 1984.

9. Driver Education has ranged from a high of 246 in 1974 to a low of 63 in 1984.

10. High School Contract enrollment has been fairly stable since 1976, ranging from a high of 556 in 1976 to a low of 499 in 1984.

Table 2 shows the total day and evening headcount enrollments by campus and evening center. The Milwaukee Campus dominated the District day headcount statistics, accounting for 66.7% of the enrollments. The Milwaukee Campus made less of an impact on evening headcount statistics, accounting for only 33.3% of the enrollments.

TABLE 1

HISTORICAL DAY AND EVENING MATC DISTRICT
FALL ENROLLMENTS* AND ANNUAL FTES

Program Level	1977-78			1978-79			1979-80			1980-81		
	Day	Eve.	Total	Day	Eve.	Total	Day	Eve.	Total	Day	Eve.	Total
Associate Degree	4,972	4,801	9,773	4,721	4,821	9,542	4,967	5,093	10,060	5,879	5,678	11,557
College Parallel	1,250	2,034	3,284	861	1,270	2,131	877	1,363	2,240	823	1,137	1,960
Certificate/Diploma	1,985	3,074	5,059	2,009	3,106	5,115	1,979	3,116	5,095	2,230	3,273	5,503
Total	8,207	9,909	18,116	7,591	9,197	16,788	7,823	9,572	17,395	8,932	10,088	19,020
Developmental - VIP Program	--	--	--	--	--	--	--	--	--	11	--	11
ABE	514	--	514	794	--	794	510	--	510	498	--	498
JTPA	226	--	226	--	--	--	202	--	202	116	--	116
Nonaidable Conferences, Institutes, Workshops										9	--	9
Cooperative, Contract Services	167	203	370	295	478	773	472	619	1,091	131	--	131
General Adult	997	1,673	2,670	1,164	1,648	2,812	805	1,770	2,575	1,582	705	2,287
Occupational Adult	84	2,862	2,946	176	2,947	3,123	136	3,030	3,166	276	4,018	4,294
Adult Avocational	1,007	5,724	6,731	1,074	4,935	6,009	960	5,149	6,109	1,392	6,125	7,517
Apprentice	809	1,183	1,992	934	1,085	2,019	1,003	1,221	2,224	748	1,066	1,814
Adult High School	514	688	1,202	410	649	1,059	506	597	1,103	524	581	1,105
Homemaking-Occupational	977	1,707	2,684	1,247	1,868	3,115	1,312	2,105	3,417	1,266	1,977	3,243
Driver Education	87	115	202	79	142	221	95	98	193	71	90	161
High School Contract	477	--	477	526	--	526	531	--	531	517	--	517
GRAND TOTAL	14,066	24,064	38,130	14,290	22,949	37,239	14,355	24,161	38,516	16,073	24,650	40,723
Full-Time Equivalency			12,331			12,022			12,019			12,601 **
ANNUAL HEADCOUNT			69,266			68,863			71,970			74,978

*Headcount enrollment as of fifth week of school.

**FTE methodology for determining High School Contract FTEs was changed in 1981-82. The comparable FTE to previous years would be 13,310 total FTEs. The 1980-81 High School Contract FTEs were adjusted to 1981-82 methodology for comparison.

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TABLE 1 (Continued)

Historical Day and Evening MATC District Fall Enrollments and Annual FTEs (Continued)

Program Level	1981-82 Day	1981-82 Eve.	1981-82 Total	1982-83 Day	1982-83 Eve.	1982-83 Total	1983-84 Day	1983-84 Eve.	1983-84 Total	1984-85 Day	1984-85 Eve.	1984-85 Total
Associate Degree	6,378	6,094	12,472	7,103	7,258	14,361	7,370	7,251	14,621	6,898	7,166	14,064
College Parallel	921	1,038	1,959	953	959	1,912	1,199	1,171	2,370	1,177	1,210	2,387
Certificate/Diploma	2,248	3,338	5,586	2,390	3,306	5,696	2,376	3,149	5,525	1,851	2,591	4,442
Total	9,547	10,470	20,017	10,446	11,523	21,969	10,945	11,571	22,516	9,926	10,967	20,893
Developmental - VIP Program	15	--	15	12	--	12	13	--	13	12	--	12
ABE	455	--	455	659	--	659	729	--	729	756	--	756
JTPA	85	--	85	164	--	164	71	--	71	75	--	75
Nonaidable Conferences, Institutes, Workshops Cooperative, Contract Services	--	--	--	--	--	--	--	--	--	--	--	
	234	--	234	131	--	131	75	--	75	126	--	126
General Adult	1,307	749	2,256	1,137	1,151	2,288	1,329	1,140	2,469	1,386	1,015	2,401
Occupational Adult	330	4,218	4,548	431	4,004	4,435	376	4,517	4,893	414	4,639	5,053
Adult Avocational	1,243	5,981	7,224	1,140	5,972	7,112	472	4,701	5,173	235	3,994	4,229
Apprentice	721	945	1,666	443	716	1,159	305	30	335	382	15	397
Adult High School	401	701	1,102	402	662	1,064	458	595	953	345	586	931
Homemaking-Occupational	1,185	2,113	3,298	1,180	2,003	3,183	101	2,295	3,096	823	2,294	3,117
Driver Education	73	90	163	36	42	78	27	39	66	28	35	63
High School Contract	534	--	534	484	--	484	530	--	530	499	--	499
GRAND TOTAL	15,330	25,267	41,397	16,665	26,073	42,738	16,031*	24,888	40,919	15,007*	23,545	38,552
Full-Time Equivalency			13,233**			14,034			14,179			
ANNUAL HEADCOUNT			75,351			79,396			76,134			

*Day enrollment statistics for Shorewood, Whitefish Bay, and Wauwatosa Centers were included in the Evening regional totals.

**FTE methodology for determining High School Contract FTEs was changed in 1981-82. The comparable FTE to previous years would be 13,310 total FTEs. The 1980-81 High School Contract FTEs were adjusted to 1981-82 methodology for comparison.

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TABLE 2

DAY, EVENING, AND TOTAL MATC HEADCOUNT ENROLLMENTS
BY CAMPUS AND EVENING CENTER

DAY AND EVENING SEMESTER 1, 1984 AND TOTALS FOR 1981-84

Campus/Center	Day 1984	Evening 1984	Day and Evening Totals 1984	1983	1982	1981
South Campus	1,824	3,284	5,108	5,475	5,630	5,200
North Campus	1,034	1,579	2,613	3,046	3,202	2,580
Milwaukee Campus	10,584	7,859	18,443	19,083	18,903	19,025
West Campus	1,565	1,967	3,532	3,921	4,219	4,048
Campus Total	15,007	14,689	29,696	31,525	31,954	30,853
Cudahy		101	101	116	170	145
Franklin		153	153	237	241	265
Greendale		598	598	628	717	723
Oak Creek		231	231	239	236	201
St. Francis		0	0	15	78	99
South Milwaukee		128	128	122	160	103
Brown Deer		1,233	1,233	1,304	1,327	1,182
Nicolet		432	432	523	596	776
Shorewood	(a)	1,631	1,631	1,636	1,889	1,722
Whitefish Bay	(a)	407	407	515	442	601
Germantown		78	78	120	149	140
Grafton		73	73	90	93	156
Port Washington		159	159	177	250	169
Mechanics Institute		37	37	22	40	70
Greenfield		173	173	194	174	129
Wauwatosa	(a)	2,166	2,166	2,091	2,611	2,592
Whitnall		98	98	130	160	210
West Milwaukee (b)		—	—	—	—	669
Nathan Hale (b)		367	367	347	—	696
Frank Lloyd Wright		316	316	305	247	96
Lane		0	0	0	637	
Horace Mann		475	475	583	587	
Center Total		8,856	8,856	9,394	10,804	10,744
GRAND TOTAL	15,007	23,545	38,552	40,919	42,758	41,597

(a) Day enrollment statistics for the Shorewood, Whitefish Bay, and Wauwatosa Centers were included in the evening regional totals.

(b) Effective Semester 1, 1981-82, the enrollment at these schools are counted as evening centers and not included in the West Campus total.

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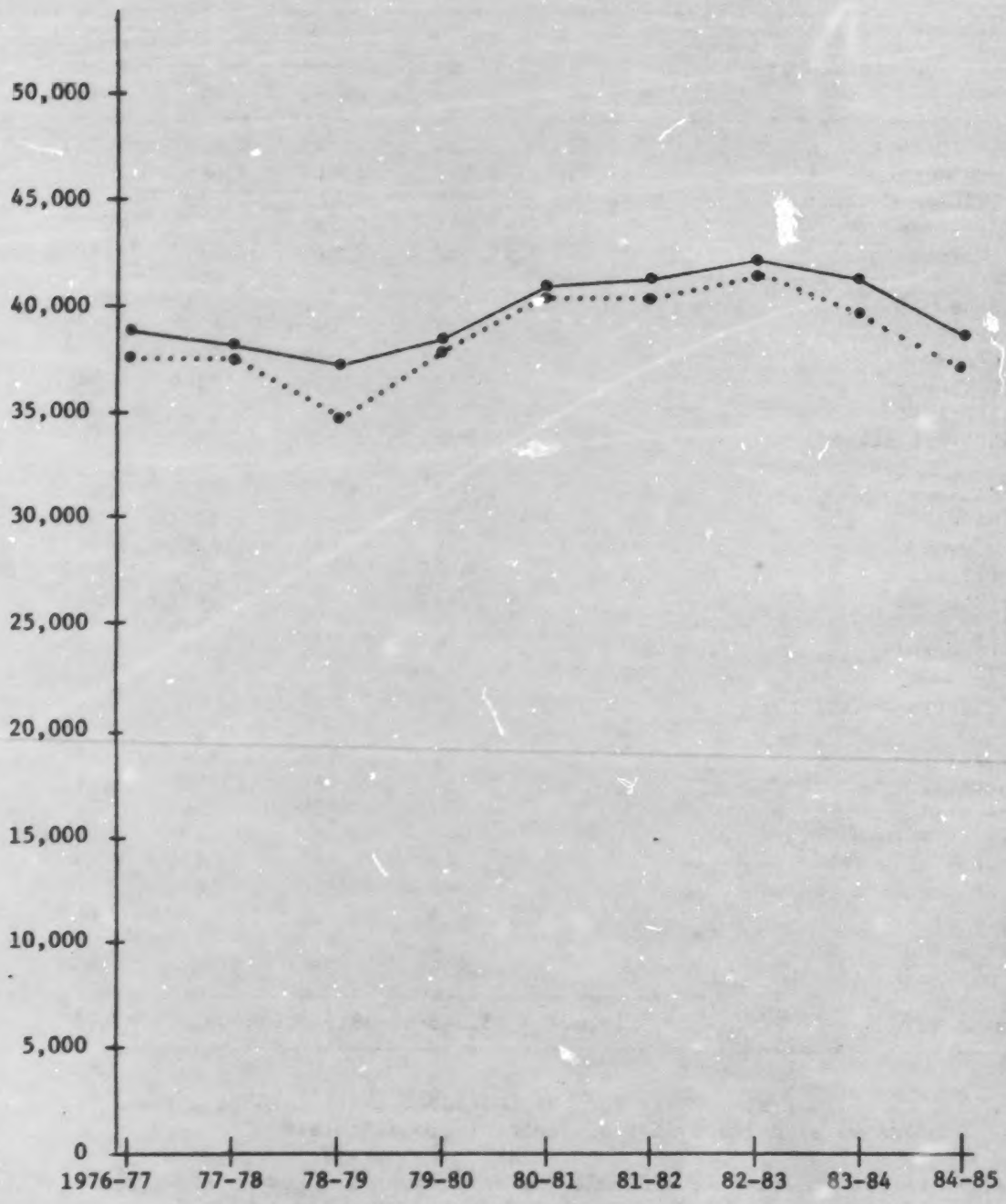
GRAPH 1

TOTAL DAY AND EVENING HEADCOUNT ENROLLMENTS

SEMESTERS 1 AND 2 - 1976-77 to 1984-85



Semester 1 - ————

Semester 2 - .....

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ENROLLMENT BY ETHNIC GROUP

The number and percentage of minorities enrolled at MATC have been increasing as shown below. The 5,626 Blacks enrolled in day or evening classes the First Semester of 1984-85 may exceed the number of Blacks enrolled in the UW System. The percentage of minorities enrolled at MATC is expected to increase over the next five years.

PERCENT OF MINORITIES IN MATC DISTRICT and HEADCOUNT and PERCENT OF MINORITIES ENROLLED AT MATC

SEMESTER 1, 1980-81 to 1984-85

	Black		Native American		Asian		Hispanic		Total Enrollment
	Head Count	%	Head Count	%	Head Count	%	Head Count	%	Headcount
MATC DISTRICT POPULATION (1980 Census)		14.32		0.57		0.53		2.86	
MATC DAY SCHOOL (Semester 1)									
1980-81	3,038	18.90	145	0.90	281	1.75	386	2.40	16,073
1981-82	3,178	19.46	171	1.05	398	2.44	374	2.29	16,330
1982-83	3,283	19.70	162	0.97	478	2.87	360	2.16	16,665
1983-84	3,488	21.76	196	1.22	460	2.87	361	2.25	16,031
1984-85	3,490	23.26	185	1.23	428	2.85	376	2.51	15,007
MATC EVENING SCHOOL (Semester 1)									
1980-81	1,848	7.50	99	0.40	244	0.99	320	1.30	24,650
1981-82	1,887	7.47	78	0.31	263	1.04	364	1.44	25,267
1982-83	2,042	7.83	128	0.49	326	1.25	399	1.53	26,073
1983-84	1.831	7.76	110	0.44	329	1.32	453	1.82	24,888
1984-85	2,136	9.07	135	0.57	300	1.27	450	1.91	23,545

FTE ANALYSIS AND PROJECTIONS

Annual full-time equivalent (FTE) enrollments have reached a high of 14,179 in 1983-84. Fluctuations in FTE enrollments since 1976-77 seem to be a result of changes in economic conditions. Enrollment has been increasing at times of high unemployment.

FTE ENROLLMENTS 1976-77 to 1984-85

Annual FTEs 1976-77 to 1984-85

1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	Est. 1983-84	Proj. 1984-85
12,599	12,351	12,022	12,019	12,601	13,235	14,034	14,179	13,441

1. Annual FTEs declined 580 (4.6%) between 1976-77 and 1979-80, and increased 2160 (18.0%) from 1979-80 to 1983-84.

2. Increases in annual FTE enrollment are largely the result of increases in Associate Degree enrollments which were up by 1860 from 1976-77 to 1983-84 (see attached Graph 2).

3. College Parallel decreased from 1976-77 to 1980-81 by 286 (-28.5%), and then increased by 174 (+24.3%) to 889 by 1983-84.

4. Vocational and Vocational-Adult have been relatively stable since 1977-78. In 1977-78 the shift of ABE enrollments from Vocational to Vocational-Adult caused a significant change in both of these categories.

5. Community Services enrollment has decreased by almost 50% from 1976-77 due to large decreases in avocational enrollment.

Annual FTEs by State Code 1980-81 to 1983-84

The following trends are shown in Table 3.

1. Associate Degree and College Parallel FTE enrollments are increasing.

2. One-year Diploma and Certificate enrollments are increasing.

3. Two-year Diploma, Adult High School and ABE have had stable enrollments.

4. CETA (JTPA), Apprentice and Avocational FTE enrollments have decreased significantly.

5. General Adult and Occupational Adult enrollments are increasing.

6. Homemaking and High School Contract have had stable enrollments. Increase in High School Contract enrollment in 1983-84 is due to VEA Contracts.

FTE by Instructional Division 1977-78 to 1983-84

Table 4 shows FTEs by instructional division, and Graph 3 highlights changes in FTEs from 1977-78 to 1983-84. Some trends in FTE enrollment by instructional division are as follows:

1. Increases in annual FTEs since 1977-78 have been due to large increases in Associate Degree FTEs in Business 849 FTE (+35%), General Education 869 FTE (+18%), and Technical 208 FTE (+45%).

2. Graphic Arts and Home Economics Divisions have increased FTEs by 109 (+19%) and 103 (+19%), respectively.

TABLE 3

NUMBER AND PERCENT OF FTEs ACCEPTED BY STATE CODE

1980-81 to 1983-84

State Code		1980-81		1981-82		1982-83		1983-84	
		No.	%	No.	%	No.	%	No.	%
02	Nonaidable Contract Service	1	0.01	5	0.04	2	0.01	13.6	.1
10	Associate Degree	6,548	51.96	7,163	54.12	7,658	54.57	7,844.3	55.32
11	Visually Impaired	28	0.22	23	0.17	41	0.29	22.3	.2
20	College Parallel	715	5.67	741	5.60	822	5.86	888.9	6.3
30	Certificate	90	0.71	117	0.88	134	0.95	147.6	1.0
31	One-Year Diploma	1,625	12.90	1,685	12.73	1,823	12.99	2,019.5	14.24
32	Two-Year Diploma	291	2.31	300	2.27	285	2.03	278.0	2.0
34	High School	619	4.91	584	4.41	561	4.00	569.6	4.0
38	ABE	226	1.79	203	1.53	202	1.44	195.8	1.4
39	CETA	208	1.65	208	1.57	264	1.88	126.8	.9
42	General Adult	532	4.22	540	4.08	627	4.47	689.1	4.9
43	Homemaking	215	1.71	210	1.59	216	1.54	212.0	1.5
44	Driver Ed Theory	9	0.07	7	0.05	5	0.04	4.6	.03
45	Driver Ed - Behind the Wheel	4	0.03	3	0.02	2	0.01	1.3	.01
47	Occupational Adult	448	3.56	469	3.54	499	3.56	542.0	3.8
50	Apprentice	391	3.10	340	2.57	293	2.09	104.7	.7
60	Adult Avocational (Nonaidable)	444	3.52	422	3.19	398	2.84	286.0	2.0
91	High School Contract	207	1.64	215	1.62	202	1.44	233.3	1.6
	TOTAL	12,601	100.00	13,235	100.00	14,034	100.00	14,179.4	100.00

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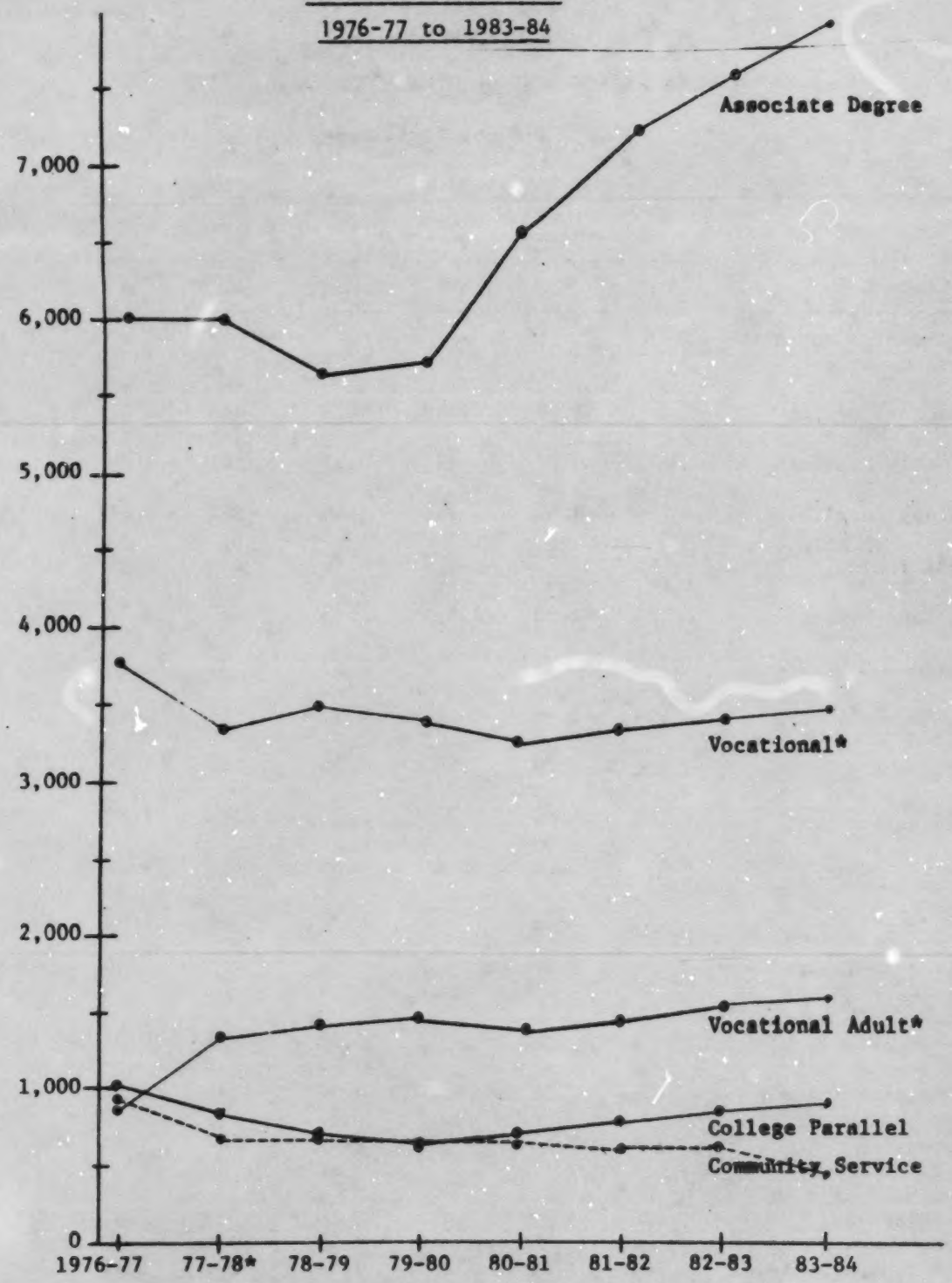
GRAPH 2

MATC FTE ENROLLMENTS

1976-77 to 1983-84



*ABE changed from Vocational to Vocational Adult.

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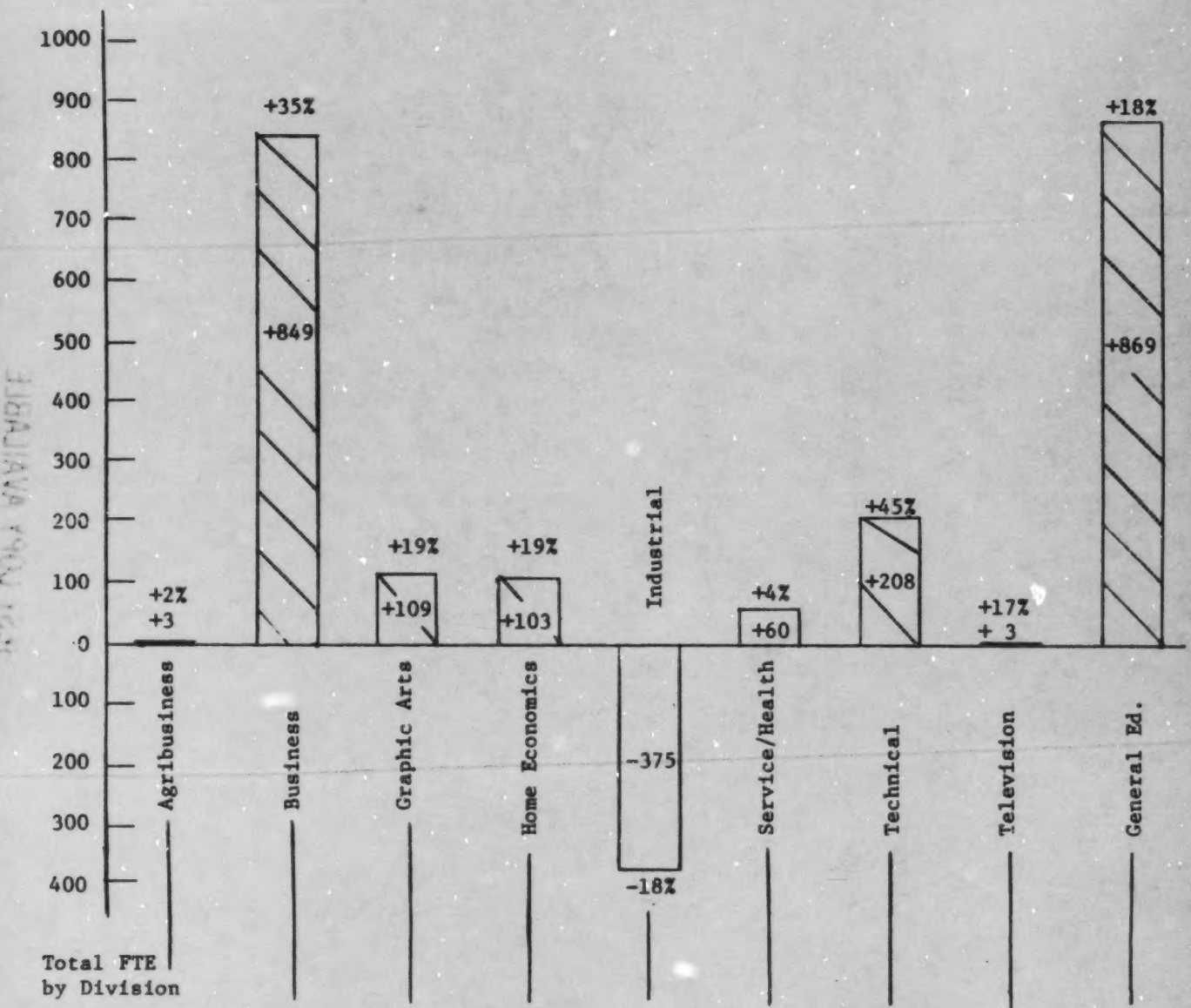
GRAPH 3

CHANGE IN NUMBER AND PERCENT OF ANNUAL FTE BY INSTRUCTIONAL DIVISION FROM 1977-78 TO 1983-84



Total FTE by Division	Agribusiness	Business	Graphic Arts	Home Economics	Industrial	Service/Health	Technical	Television	General Ed.
1977-78	128	2,458	582	532	2,021	1,338	459	19	4,813
1983-84	131	3,307	691	635	1,646	1,398	667	22	5,682

Total Annual FTE	
1977-78	12,351
1983-84	14,179

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TABLE 4

FTE BY INSTRUCTIONAL DIVISION
1977-78 - 1983-84

DIVISION	1977-1978	1978-1979	1979-1980	1980-1981	1981-1982	1982-1983	1983-1984
Agribusiness	128.68	164.46	145.8	142	144.07	141.54	131.30
Business	2,458.60	2,337.71	2,379.3	2,605	2,804.24	3,206.21	3,307.12
Graphic Arts	581.88	628.10	633.6	657	704.40	702.61	690.83
Home Economics	532.27	524.12	562.6	641	625.77	654.89	635.36
Industrial	2,020.92	2,205.66	2,109.8	1,830	1,805.40	1,727.99	1,646.37
Service/Health	1,338.19	1,242.96	1,198.3	1,195	1,330.13	1,391.03	1,397.91
Technical	459.39	488.05	481.6	522	592.57	641.69	666.92
Television	18.63	18.93	18.5	23	26.67	25.20	21.83
General Education	4,812.54	4,411.65	4,489.7	4,986	5,202.47	5,543.18	5,661.85
TOTAL	12,351.10	12,021.64	12,019.2	12,601	13,235.72	14,034.34	14,179.49

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FTE by Instructional Division (Cont.)

3. Agribusiness FTEs have been declining since 1978-79 while Service and Health have increased 202 since 1980-81.

4. Industrial FTEs have declined 375 (-18%) since 1977-78.

Enrollment by Campus

FTE enrollment at regional campuses, as shown in Table 5, has increased significantly in the last 4 years. Increases by campuses from 1980-81 to 1983-84 are as follows:

FTE ENROLLMENTS

	Day		Evening		Total		
	1980-81	1983-84	1980-81	1983-84	1980-81	1983-84	
South Campus	817	1,068	520	581	1,353	1,666	+23%
North Campus	448	668	192	275	652	968	+48%
Milwaukee Campus	6,939	7,469	1,677	1,819	8,885	9,644	+8.5%
West Campus	558	770	239*	257	857*	1,047	+22%
Total**	8,762	9,975	3,032	3,786	12,601	14,180	+12%

*1981-82 is used because 1980-81 FTE includes evening centers and cannot be compared to 1983-84.

The large increases in FTE at regional campuses is due to increases in enrollments in business programs.

**Includes Evening Centers.

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TABLE 5

FTE's by Location, Instructional Division, and Time
1980-81 to 1983-84

	1980-81				1981-82				1982-83				1983-84			
	DAY	EVE	SUMMER	TOTAL	DAY	EVE	SUMMER	TOTAL	DAY	EVE	SUMMER	TOTAL	DAY	EVE	SUMMER	TOTAL
SOUTH CAMPUS																
Agribusiness		1.47		1.47		1.59		1.59		1.38		1.38		1.83		1.83
Business	124.94	185.12	4.06	314.12	128.43	177.17	5.77	311.37	183.98	209.24	9.07	402.29	206.86	220.63	8.18	435.67
Graphic & Applied Arts	5.67	12.85		18.52	6.01	12.88		18.89	7.15	14.03		21.18	8.02	12.56		20.58
Home Economics	51.64	33.42	0.48	85.54	53.21	30.44		83.65	53.14	27.55		80.69	49.31	26.29		75.60
Industrial	346.11	130.88	6.93	483.92	348.32	133.26	3.16	484.74	328.42	135.46	3.92	467.80	400.34	128.95	4.24	533.53
Service Occupations	17.69	8.90		26.59	44.47	16.24		60.71	58.36	18.27		76.63	68.81	20.16	0.44	89.41
Health Occupations	7.00	0.47		7.47	7.50			7.50	7.83			7.83	8.00	0.17		8.17
Technical	66.06	5.07		71.13	76.47	3.37		79.84	68.61	9.90		78.51	68.67	9.36		78.03
General Education	198.36	141.33	4.32	344.01	220.73	131.03	5.24	357.00	234.53	143.06	6.50	384.09	257.84	160.73	4.76	423.33
Total	817.47	519.51	15.79	1352.77	885.14	505.98	14.17	1405.29	942.02	558.89	19.49	1520.40	1067.85	580.68	17.62	1666.15
NORTH CAMPUS																
Agribusiness	120.20	5.41	2.96	128.57	123.63	7.03	4.90	135.35	123.00	8.23	2.95	134.18	111.71	9.74	4.65	126.10
Business	134.36	79.00	5.27	219.13	156.39	104.37	4.62	265.38	255.57	147.29	9.50	412.36	283.04	165.02	10.86	458.92
Graphic & Applied Arts	5.89	10.46		16.35	5.55	12.13		17.68	8.39	12.88		21.27	4.80	10.69		15.49
Home Economics	42.02	16.76		58.78	44.92	16.94		61.86	64.75	15.87		80.62	52.20	11.63		63.83
Industrial	56.21	26.54	0.62	83.37	61.03	25.96	1.42	88.41	64.18	22.60	6.43	93.21	44.20	14.72		58.92
Service Occupations	0.50	5.56		6.06	4.76	4.60		9.36	12.55	4.22		16.77	10.08	3.53		13.61
Health Occupations	7.50	5.47	0.40	13.37	6.15	4.40		10.55	23.18	1.09		24.27	24.35	1.30		25.65
Technical				0.00				0.00		0.90		0.90		0.80		0.80
General Education	80.73	42.83	2.90	126.46	80.51	43.22	2.10	125.83	131.95	54.79	3.80	190.54	138.02	57.56	9.40	204.98
Total	447.91	192.03	12.15	652.09	482.94	218.64	13.04	714.62	683.57	267.87	22.68	974.12	668.40	274.99	24.91	968.30
MILWAUKEE CAMPUS																
Business	1091.78	448.66	43.81	1584.25	1186.27	475.39	48.91	1710.57	1263.21	482.84	57.08	1803.13	1234.69	488.10	51.59	1774.38
Graphic & Applied Arts	391.91	89.48	5.80	487.19	447.25	78.48	7.05	532.78	434.60	82.89	4.80	522.29	450.05	82.42	4.40	536.87
Home Economics	184.56	41.11		225.67	173.53	43.79		217.32	168.12	48.35		216.47	191.51	53.45		234.96
Industrial	811.76	181.52	2.56	995.84	776.16	171.42	12.58	960.16	735.92	163.44	19.23	918.59	655.90	131.79	6.93	794.62
Service Occupations	471.56	84.46	20.89	576.91	480.11	73.93	23.30	577.34	494.68	91.51	29.58	615.77	505.32	96.98	21.46	623.76
Health Occupations	503.57	9.14	35.37	548.08	615.43	8.33	38.90	662.66	598.43	8.91	40.34	647.68	585.39	5.96	45.33	636.68
Technical	304.73	125.26	15.60	445.59	349.20	131.18	27.57	507.95	394.94	129.87	31.58	556.39	486.40	133.69	33.73	573.82
Television	22.67			22.67	26.67			26.67	25.20			25.20	21.83			21.83
General Education	3156.79	697.41	144.41	3998.61	3317.51	696.51	157.75	4171.77	3422.97	747.03	197.67	4367.67	3428.12	827.06	192.14	4447.32
Total	6999.33	1677.04	268.44	8884.81	7372.13	1679.03	316.06	9367.22	7538.87	1754.84	380.28	9673.19	7469.21	1819.45	355.58	9644.24

TABLE 5 (Cont.)

FTE's by Location, Instructional Division, and Time
1980-81 to 1983-84

	1980-81				1981-82				1982-83				1983-84			
	DAY	EVE	SUMMER	TOTAL	DAY	EVE	SUMMER	TOTAL	DAY	EVE	SUMMER	TOTAL	DAY	EVE	SUMMER	TOTAL
WEST CAMPUS																
Agribusiness		4.09		4.09		2.66		2.66		1.12		1.12				0.00
Business	131.32	166.10	4.89	302.31	142.10	92.29	5.62	240.01	184.00	89.73	8.84	282.57	211.58	94.97		306.55
Graphic & Applied Arts	32.23	19.22		51.45	32.26	15.17		47.43	44.03	13.56		57.59	52.93	14.18	9.33	76.44
Home Economics	57.14	48.79		105.93	61.13	35.70		96.83	64.74	37.87		102.61	67.16	34.12	0.52	101.80
Industrial	137.09	50.21	1.15	188.45	142.11	52.40	2.45	196.96	119.89	45.71	13.72	179.32	159.44	40.90	1.59	201.93
Service Occupations		15.20		15.20				0.00				0.00	0.63			0.63
Health Occupations		1.40		1.40		0.10		0.10				0.00				0.00
Technical	4.27	1.20		5.47	4.80			4.80	4.67			4.67	9.73	3.87		13.60
General Education	195.48	143.23	5.03	343.74	222.31	40.85	5.19	268.35	243.73	78.68	12.69	335.10	268.13	68.98	9.15	346.26
Total	557.53	449.44	11.07	1018.04	604.71	239.17	13.26	857.14	661.06	266.67	35.25	962.98	769.60	257.02	20.59	1047.21
EVENING CENTERS																
Agribusiness		7.19		7.19		4.29		4.29		4.88		4.88		3.37		3.37
Business		184.67		184.67		277.00		277.00		305.82		305.82		324.54		324.54
Graphic & Applied Arts		83.89		83.89		87.66		87.66		80.32		80.32		60.53		60.53
Home Economics		165.35		165.35		166.25		166.25		174.54		174.54		147.45		147.45
Industrial		78.03		78.03		74.19		74.19		69.06		69.06		57.42		57.42
Service Occupations		0.70		0.70		1.90		1.90		2.10		2.10				0.00
Health Occupations				0.00				0.00				0.00				0.00
Technical				0.00				0.00		1.23		1.23		0.67		0.67
General Education		173.71		173.71		279.59		279.59		265.66		265.66		260.01		260.01
Total		693.54		693.54		890.88		890.88		903.61		903.61		853.99		853.99
Grand Total	8762.24	3531.56	307.45	12601.25	9344.92	3533.70	356.53	13235.15	9824.72	3751.88	457.70	14034.30	9975.06	3786.13	418.70	14179.89

Notes:

1) Years 1980-81 through 1982-83 reflect the annual state accepted FTE total; 1983-84 is the FTE total submitted to the state, subject to further edits.

2) College of the Air is included in the Milwaukee Campus enrollments.

3) Day enrollments at the Shorewood, Whitefish Bay and Wauwatosa Centers are included in the Evening total.

4) Evening enrollments at West Milwaukee, Nathan Hale and Frank Lloyd Wright are included in the West Campus total for 1980-81. In 1981-82 to the present, these locations are included in the Evening Centers total.

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ENROLLMENT BY AGE

Significant increases in the median age of day (27 to 31) and evening (31 to 34) students took place from 1981-82 to 1982-83. As shown in Table 6, significant increases occurred in all program areas including Associate Degree, College Parallel, and Vocational Diploma, which represent about 75% of the MATC FTE enrollment. This increase in median age is believed to be the result of high unemployment. Large increases in FTE enrollment in 1982-83 and small increases in 1983-84 appear to be caused by the increases in the number of students over age 24. This median age is expected to decrease somewhat in 1984-85 as employment improves and the pool of unemployed wanting to attend MATC decreases.

PROJECTION OF ENROLLMENTS

In order to maintain annual FTE enrollments at the 1984-85 level of about 13,500, it will be necessary for MATC to increase the percentage of high school students who attend MATC directly after graduation, and to continue to enroll numbers of students over 24 in Associate Degree, College Parallel and Diploma and Certificate Programs near 1982-83 and 1983-84 levels shown in Table 7. MATC will also continue to serve the large population who discontinue their high school education prior to graduation.

To project annual FTE enrollment, the MATC headcount enrollment by age and percentage of District population for Associate Degree, College Parallel and Diploma Certificate has been determined for the last four years. Since it is believed that the large increases in enrollment in 1982-83 were the result of economic conditions and unemployment, which may fluctuate, an average percentage of District population over the last four years was utilized to make projections shown in Table 7. This projection shows a decrease in 1984-85 FTE by 5.2% to 13,441 and small decreases of .8% per year to 1989-90. It is believed that enrollment should stabilize between the 12,600-14,200 range depending upon economic conditions and MATC marketing efforts over the next five years.

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TABLE 6

MATC Annual Median Age

1974-75 to 1983-84

Day and Evening

		1983-84	1982-83	1981-82	1980-81	1979-80	1978-79	1977-78	1976-77	1975-76	1974-75
Associate Degree -	Day	27	26	24	24	24	24	23	23	24	24
-	Eve	30	30	28	28	28	28	28	28	28	28
Develop. - VIP Crossover -	Day	25	25	23	24	23	23	22	22	22	21
College Parallel -	Day	27	27	25	25	26	25	24	24	24	25
-	Eve	29	30	27	28	28	28	27	28	28	28
Voc.Diploma -	Day	28	28	25	25	24	24	24	23	24	24
Certificate	Eve	33	33	30	29	29	29	28	28	28	29
Gov't Contract -	Day	29	28	25	24	24	23	23	23	24	24
Apprentice -	Day	26	26	25	24	24	24	24	23	24	24
-	Eve	29	30	27	26	26	25	25	25	25	25
Adult High School-	Day	25	24	22	21	22	22	22	22	22	22
-	Eve	26	26	24	22	22	22	22	23	22	22
Other* -	Day	35	37	35	35	34	34	36	37	37	37
-	Eve	39	37	34	32	33	33	32	32	32	32
Total -	Day	30	31	27	27	27	26	26	26	26	27
-	Eve	35	34	31	30	30	30	29	30	30	30

*Other includes the following: Driver's Ed, Avocational and Institutes, Workshop, Contract.

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TABLE 7

9/28/84

POSTSECONDARY

Annual Day and Evening Headcount by Age, and
Projections Based on Percentage of District Population
Enrolled by Age to the Year 2000

MATC ENROLLMENT BY AGE AND % OF DISTRICT POPULATION

	18-24	%	25-34	%	35-44	%	45-59	%	Over 60	%	Total	% Change
ACTUAL												
1980-81	11,047	7.66	10,849	6.21	3,681	3.52	2,343	1.43	654	0.37	28,574	
1981-82	11,642	8.31	11,505	6.70	4,113	3.81	2,417	1.51	274	0.15	29,951	+4.8
1982-83	11,977	8.80	12,307	7.29	4,889	4.38	2,783	1.78	629	0.35	32,585	+8.8
1983-84	11,587	8.77	12,881	7.77	5,445	4.73	2,759	1.81	677	0.37	33,349	+2.3
Average % of District Population Over Last Four Years		8.37		6.98		4.13		1.63		0.31		

PROJECTED HEADCOUNT BASED ON TOTAL POPULATION BY AGE AND
FOUR-YEAR AVERAGE PERCENTAGE OF DISTRICT ENROLLMENT BY AGE

1984-85	10,372	8.37	13,254	6.98	5,043	4.13	2,371	1.63	570	0.31	31,609	-5.2
1985-86	10,017	"	13,174	"	5,243	"	2,342	"	572	"	31,348	-0.8
1986-87	9,663	"	13,094	"	5,442	"	2,314	"	574	"	31,086	-0.8
1987-88	9,308	"	13,013	"	5,642	"	2,285	"	577	"	30,825	-0.8
1988-89	8,954	"	12,933	"	5,841	"	2,257	"	579	"	30,564	-0.8
1989-90	8,599	"	12,853	"	6,040	"	2,228	"	582	"	30,303	-0.8
1994-95	7,697	"	11,152	"	6,703	"	2,457	"	573	"	28,582	-5.7
1999-2000	7,726	"	9,602	"	6,703	"	2,897	"	561	"	27,490	-3.8

ACTUAL AND PROJECTED TOTAL ANNUAL FTE BASED ON
ESTIMATED % CHANGE OF HEADCOUNTS TO THE YEAR 1990

Actual		% Change	Projected		% Change
1980-81	12,601	+4.8	1984-85	13,441	-5.2
1981-82	13,235	+5.0	1985-86	13,333	-0.8
1982-83	14,034	+6.0	1986-87	13,226	-0.8
1983-84	14,179	+1.0	1988-89	13,119	-0.8
			1989-90	13,104	-0.8

POSTSECONDARY includes the following: Associate Degree, College Parallel, Diploma, Certificate.

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CHAPTER V

OVERVIEW OF EMPLOYMENT OUTLOOK

MATC, like many other agencies, businesses, and industries, is concerned about the employment outlook for the country in general and the MATC District in particular. Recent economic history has shown that no one has a crystal ball concerning the economy of the Milwaukee area. This chapter will examine some trends and comment on the employment opportunities for specific MATC graduates. Information supplied by the MATC Placement Office and the Office of Research, Planning, and Development, along with reports from Job Service and the monthly Labor Review, were used as sources for this chapter.

In the next ten years, recovery is expected in construction and durable goods, but services will continue to lead job growth. Most analysts feel heavy industries will not reach past peaks because changing markets and technologies will tend to dampen expansion. Manufacturing, which represented 25% of all jobs in the U. S. in 1959, has currently dipped to less than 19%. It is expected to maintain this 19% share through the 1984-95 period. Service-producing industries (these include: transportation, communications, public utilities, trade, finance, insurance, real estate, government, and other services) are projected to account for almost 75% of all new jobs between now and 1995.

High Technology industries, although very glamorous, are expected to provide only a small portion of the jobs created between 1985 and 1995.

Agribusinesss: The MATC Placement Office reports that opportunities in Agribusiness are highly seasonal and low paying. Jobs in horticulture, aboriculture, and generally urban agriculture are expected to remain constant. Turnover is speculated to be a contributing factor.

The August 1981 Monthly Labor Review reported that employment of farm workers has declined for decades as farm productivity has risen as a result of larger, more efficient farms, improvements in mechanized equipment, and technological innovations in seed, feed, and fertilizer. Continued drops in the number of farm workers are expected through the remainder of this decade.

Business: An estimated 23,760 skilled office workers will be needed to meet Milwaukee area's needs by 1990, a study by the Metropolitan Milwaukee Association of Commerce revealed in May 1981. In office skills, this would be a 50% increase over current employment. The biggest reason given is turnover (57%), followed by additional growth (21%), and promotions (13%).

Occupations expected to show the largest office worker needs are secretaries (12,000), typists (4,500), computer programmers (2,000), and computer operators (1,300). Office occupations with the fastest expected growth include computer programmers, dictating machine operators, computer operators, secretaries, and typists, in that order. Only 2% of employees are in company training programs for these skills, the MMAC study reports, in contrast to a much larger proportion in industrial training programs.

Some of the growth in clerical occupations may occur more slowly than originally projected because of office automation.[5]

Graphic and Applied Arts: Job opportunities exist in these areas. Opportunities for all graduates are not always available at graduation, particularly those seeking specific kinds of work. Commercial Art and Photography are competitive fields. After graduation, many students enter the field through entry-level positions to gain experience and build a portfolio possibly as a key line and paste-up artist or photographic lab assistant. However, the MATC Placement Office reports that opportunities arrive consistently around the calendar, and graduates with the patience to wait will usually find work in their areas of interest. Overall, we are currently at a balance between opportunities and graduates.

Computer Graphics technology is impacting commercial art areas. MATC faculty are learning the technology. Adaptions of courses in Commercial Art would be needed in the next three to five years to apply new technology to traditional procedures. Other technological changes, such as high-speed laser printers, will revolutionize the printing industry over the next five years.

Health Occupations: Recent surveys by the MATC Office of Research, Planning, and Development indicate that there should be caution in projecting employment in the dental auxiliaries. The professionals in the field believe that there will be jobs for our graduates but that we should not expand our programs.

The Health Occupations Division's research indicates that the licensed practical nurses may not have the job opportunities they once had. National projections indicate 642,000 new jobs for registered nurses between 1982 and 1995, and 220,000 new jobs for licensed practical nurses during the same time. Both of these represent a faster-than-average growth rate.[5] Locally, surveys by the MATC Office of Research, Planning, and Development suggest a slower-than-average growth rate for both registered nurses and licensed practical nurses. However, independent local research reveals several major hospitals in the greater Milwaukee area are employing only baccalaureate-prepared nurses. Great numbers of professional nursing programs exist in Milwaukee (see pages 22-23). Medical Assistants, Physical Therapist Assistants and other allied health workers may be needed to cover the proliferation of medical-surgical access centers, etc.

Service Occupations: The August 1981 Monthly Labor Review had many projections for service occupations:

a. Employment of police officers, fire fighters, and most other protective service workers is projected to grow slower than the average for service occupations, but faster than that for all occupations between now and 1990.

b. Qualification requirements for personnel in the service areas will be raised, and applicants will be required to have some training prior to obtaining jobs in many of the service areas.

Also, there will be an increase in the number of people already employed in the field, such as police officers and fire fighters, who will continue their education while employed.

c. Opportunities for Restaurant and Hotel Cookery graduates continue to improve each year. As the population increases and as more and more eating places are being established, as incomes rise and more families have both husbands and wives working, it follows that the need for kitchen personnel increases also. There is a trend for increasing numbers of people to eat out. That trend is expected to continue in spite of the inflation we are currently experiencing.

d. Projected growth rates are mixed among personal service occupations. For example, rapid increases in the demand for child care workers and welfare aides are anticipated, but only moderate increases in employment are expected for barbers and cosmetologists.[4] The Funeral Service program at MATC continues to be the only such program in the State of Wisconsin. The graduates currently meet the demand and that is expected to continue for the next five years.

Industrial: According to MMAC's 1981 study of Milwaukee area's needs by 1990, a 50% increase is expected in industrial jobs, an estimated 8,640 persons over current employment levels. In spite of metropolitan Milwaukee's Number 1 standing among the 30 largest metro areas in the country in ratio of manufacturing jobs to other employment, this area has not been able to solve its skilled labor shortage which also affects industry all over the country. Occupations reported by that study to have the fastest growth rate include heating and air conditioning repairers (83% increase by 1990), model makers (up 70%), and electronic technicians (68%).

Although employment, economic, and technological changes may occur in the next five years, the MATC Placement Office expects that MATC's programs related to industrial production will not be seriously affected. Examples of such programs are machine shop, welding, tool and die, numerical control, and foundry.

A recent study by the MATC Office of Research, Planning, and Development estimated that there will be over 2,000 new jobs for machine tool operators during the next five years at the 135 Milwaukee area industries surveyed.[6]

Demand for auto servicing is currently low as many auto dealerships have gone out of business. Nevertheless, the Technical and Industrial Division of MATC anticipates changes in the auto servicing program over the next three to five years as skills in electronics will be required to service fuel injection, computer-command ignition systems, and electronics used in conjunction with automatic transmissions. The impact on MATC will be to add more math to the Auto Servicing curriculum. Recruitment of current mechanics for upgrading and retraining is also suggested as their skills will become outdated.

For servicing the gasoline engine, MATC will need more electronic testing; e.g., for testing computers, modules, and other components. For expanded diesel engine instruction, MATC will need some fuel testing stands for testing injectors and pumps.

The Technical and Industrial Division also speculates the demand for auto body repairmen is to increase as the auto industry has moved from full-size autos on a frame to the compact cars which are unibody construction. Accidents in smaller vehicles cause greater damage and greater demand for repairs. Eight to ten percent of the auto market used to be front-wheel drive. Now, with the X-body designed cars, a new dimension to training and auto body repair is introduced.

Technical: Salaries for graduates of technical programs are among the highest of all MATC graduates.[7]

MATC Placement Office data shows that demand for Chemical Technicians continues to exceed the number of graduates and, in fact, over the last ten years has been little affected by the economy.

Employer demand for Biomedical Electronics graduates has steadily increased since 1978 and reached a new high in 1982 in spite of an economic recession. More electronic equipment is being designed for the medical field. As that occurs, more technicians are needed to install, maintain and calibrate such equipment.

With the computer graphics industry, including the computer-aided design and manufacturing (CAD/CAM) sector, growing at a compound rate of more than 40% annually, finding qualified personnel to develop and operate new graphics systems is sometimes difficult. Companies are sometimes investing millions of dollars in computer graphics equipment, and on top of that cost, the programmers and other professionals needed to support their equipment are commanding salaries that are 10 to 15% more than their counterparts in closely related industries.[7]

Computer-Aided Manufacturing is planned to lead the expansion of automation, numerical control, and robotics in industry.

A recent study conducted by Carnegie-Mellon University points out the adaptability of robots to the metal-working industries which are prevalent in Wisconsin. The use of robots forces us to confront the short-term prospects of technological displacement and the longer-term prospects of structural shifts in the economy. Robots are only one of several change agents. Advances are also being made in product design, metal cutting, metal forming, finishing, assembly, and inspection. Under the control of computers, modifications will need to be made in the mix of skills to work in the factory of the future.[8]

CAD/CAM (Computer-Aided Design/Computer-Aided Manufacturing) is currently stretching engineering expertise three or four times further than it has ever gone. Still in their "adolescence," CAD/CAM systems are already capable of speeding up the drafting process; making it easier to improve earlier designs controlling lathes, drills, milling machines, and presses; and telescoping the time it takes to get a new

product on the market. Some experts forecast that within the next five years a CAD/CAM firm will be able to write the software that will turn an image in the computer's memory into a full menu of instructions for automatically controlling the entire production process.

A related TAP abstract on technology and productivity forecasts that computer-integrated manufacturing will reduce industrial costs by one-half to two-thirds, so that small-lot industry can be as economical as, if not more economical than, large-scale manufacturing.[9]

Research conducted recently by MATC as part of a project funded by the Fund for the Improvement of Postsecondary Education (FIPSE) identified future jobs in computer-integrated manufacturing and also identified skills needed by the worker in the automated factory of the future. In other research, MATC has found that there will be employment for both plastics technicians and plastics operatives in the Milwaukee area.[10]

Television: Our MATC Placement Office reports that competition for jobs in the field of TV has been quite keen. Graduates of our Telecasting program find themselves competing with graduates of four-year programs. Follow-up studies show a significant number of graduates going for further schooling. This situation appears to be the pattern expected for the future, too.

General Education: Reading, science, and math literacy is being urged for pre-college levels of education. The high school dropout problem in Wisconsin is significant. Students who later in life wish to develop their basic skills have few places to go other than MATC.

College Parallel enrollments have increased in 1983 for the first year since 1971. Enrollments in other General Education programs at MATC, Basic Education and Crossover, have been increasing regularly.

Milwaukee's concentration of women in the work force is 46% according to a recent study released by the Milwaukee Area Job Service. Over 18% of the MATC District population is minority.

General Education crosses all occupational programs and contributes to a student's basic skill development as well as his/her personal development.

There does not appear to be need for large numbers of new programs to be developed. However, changes in technology and occupational skills and knowledge required for jobs means that all occupational curricula will have to be continuously monitored and updated to ensure that students are adequately prepared for jobs.

In order to determine the employment needs of the metropolitan Milwaukee area, MATC is conducting an employment, training, and technological change needs assessment in cooperation with Waukesha County Technical Institute (WCTI), the Milwaukee Public School (MPS), the City and County of Milwaukee, The Wisconsin Gas and Electric Companies, Wisconsin Bell, the Metropolitan Milwaukee Association of Commerce (MMAC), and the Milwaukee County Labor Council AFL-CIO.

This needs assessment has five primary goals:

1. To establish stronger linkages between the educational and business communities which will facilitate a comprehensive human resource planning effort;

2. To assess patterns of occupational demand for key technical job classifications within selected industry groups;

3. To inventory the crucial technical skills anticipated by business and industry within a selected group of existing and emerging job classifications;

4. To provide data necessary to select appropriate and cost-effective educational policy options to meet the needs of metropolitan employers;

5. To disseminate data relative to labor market demand to targeted groups to assist them in making appropriate training and retraining choices.

The needs assessment survey has been mailed to over 1600 employers in the following groups: durable goods manufacturing; non-durable goods manufacturing; banking and finance; services, and wholesale-retail trade.

The results of these surveys and follow-up interviews will be available later in 1985.

In addition to this, MATC conducts ongoing surveys of business and industry for specific instructional programs as part of the program evaluation process.

FOOTNOTES

1 "The Job Outlook Through 1995: Industry Output and Employment Projections."

2 "High Technology Today and Tomorrow: A Small Slice of the Employment Pie."

3 "Occupational Employment Growth Through 1990," Monthly Labor Review, August 1981.

4 "Skilled Worker Needs Through 1990," Metropolitan Milwaukee Estimates, May 1981.

5 "Occupational Employment Projections to 1995," Monthly Labor Review, November 1983.

6 "Specific Skill Needs Assessment for Machine Shops in the Milwaukee Area," MATC, March 1984.

7 "The Graphics Gap: Qualified Personnel," Vocational, Technical Education Insider; American Vocational Association, November-December 1981.

8 "Preparing for the Growth of Industrial Robots," Ayres, Robert and Miller, Steven; Carnegie-Mellon University.

9 "The Uncertain future," TAP20, Trend Analysis Program, American Council of Life Insurance, Spring 1981.

10 "Plastics Industries Needs Assessment," MATC, August 1983.

CHAPTER VI

OPERATIONAL PLANNING ASSUMPTIONS AND RECOMMENDATIONS

Planning assumptions and recommendations have been prepared by two Educational Planning Task Forces (Programs and Services, and Student Services and Student Affairs). These task forces were composed of MATC Administration appointed by the District Director. The MATC Board Strategic Planning assumptions and policies were utilized in developing the operational assumptions and recommendations.

EDUCATIONAL/STUDENT PROGRAMS AND SERVICES

Assumptions:

1. Enrollment which has increased in each of the last three years will stabilize in the next five years, with some increases and decreases depending upon economic conditions and escalating tuition and fees.

2. MATC enrollment will decrease in 1984-85 due to improved economic conditions and escalating tuition and fees.

3. Changes in the number of high school graduates will have little immediate effect on the enrollments at MATC because of the broad age ranges that MATC draws from.

4. Enrollment of students for entry into the job market will remain strong, and may continue to increase because of the technological nature of our society, which requires higher skill levels.

5. There will be a continued need for upgrading remedial and special education for large segments of the population, including unemployed, disadvantaged, handicapped, and minorities.

6. There will be a continuing need for high school contract programs and other cooperative arrangements with secondary schools.

7. Cable television, multiple distribution services, instructional TV, fixed services, teletext, and a variety of emerging electronics communication technologies will afford opportunities for expanded, innovative educational services to the MATC District.

8. To stimulate economic development, there will be a continued demand for training and upgrading in business, industry, labor, and government. New technology upgrading will be mandatory to meet projected skilled labor demand.

9. There will be a continued need to satisfy the educational needs of individual students but, in the future, there will be an increase of programs to satisfy the collective needs of groups of people associated with specific organizations.

10. Increasing numbers of minorities will be enrolled in and will be completing vocational and technical programs for job entry.

11. Continuing increases in female employment and MATC enrollment of women in varied occupational programs are expected.

12. The Milwaukee Campus will continue to draw students from throughout the District. The Regional Campuses will draw strongly from their immediate areas.

Recommendations

1. Entrance requirements for all diploma and degree programs should be reviewed and minimum requirements should be established for all programs whenever feasible. This is to ensure that students have a reasonable chance of success in the program. All students who meet the minimum requirements will be treated equally for enrollment.

2. Satisfactory progress standards for all students in certificate, diploma, and degree programs should be established and enforced.

3. Remedial, tutorial, or special education should be provided for students who are not adequately prepared to begin, or who have made unsatisfactory progress in, a degree or diploma program. These courses or services are provided to encourage students to enroll in an occupational program and to increase the number of students who successfully complete courses and programs.

4. Recruitment and counseling of minorities, men and women, into occupational programs in which they are under-represented should be emphasized.

5. Tutorial services should be expanded with increased funding.

6. Recruitment of displaced workers and unemployed youth, with appropriate supporting services, into vocational technical education, training and upgrading, or remedial and special education, should be emphasized.

7. MATC should continue funding of counseling and other support services for those with special needs such as the handicapped and other protected class groups to ensure enrollment and completion of courses and programs by those students.

8. General Education course requirements for Associate Degree programs, including physical education, should be reviewed to determine if they are consistent with educational needs of MATC students.

9. Articulation of programs with secondary schools should be increased, including cooperation in and encouragement of high school accelerated programs. In addition, credit for high school work should be allowed when cooperative agreements have been established with secondary schools.

10. Articulation agreements with postsecondary institutions should be established so that MATC students may more easily transfer.

11. In order for new programs to be started, or existing instructional programs expanded, it will be necessary to discontinue or reduce programs or courses based on evaluation utilizing criteria established by the MATC Board's Strategic Planning Statement. It is intended that discontinuance or reduction of programs or courses will be the source of faculty positions and facilities for new or expanded programs.

12. An objective of programming is to increase enrollments and utilization of facilities at Regional Campuses by a) increasing course offerings and programs whenever possible; b) better utilizing faculty throughout the MATC District through improved scheduling; and c) reducing the number of low-enrollment sections.

13. Alternatives to using full-time faculty to teach apprentice programs should be investigated and used when feasible.

14. Educational offerings extending over non-traditional timeframes, weekend college, summer evenings, late afternoons and evenings, and at various locations, should be investigated and implemented whenever feasible.

15. Responsibility for MATC's fragmented marketing efforts should be combined into a comprehensive, coordinated marketing program.

16. In order to deliver Economic Development activities, the Business and Industry centralized outreach office should continue to coordinate outreach activities with all instructional divisions.

17. The State-mandated elective requirements for Associate Degree programs should be reviewed with the State WBVTAE to determine if they are consistent with the educational needs of MATC students.

EDUCATIONAL FACILITIES

Assumptions:

1. There will be no great expansion of instructional facilities at MATC campuses.

2. There will be a need, District-wide, for continuing remodeling, renovation, and some new construction at the Milwaukee Campus, to meet the physical facilities requirements for students and new or modified instructional programs.

Recommendations

1. A five-year plan for the renovation and updating of educational facilities should be prepared.

2. To ensure adequate utilization of District facilities, efforts should be made to utilize Regional Campuses for programs and services whenever feasible.

3. A conference and teleconferencing center for special programs for business, industry, labor, governmental and social agencies should be provided and arrangements should be made for use of special educational facilities for these activities whenever possible.

4. Facilities for alternative methods of instruction such as the use of various types of telecommunications should be provided.

5. Facilities of Channels 10/36 should be integrated with instructional programming and be more extensively used for instruction.

EDUCATIONAL EQUIPMENT

Assumptions:

1. There will be a continuous need for upgrading of equipment and related facilities for technological advances in instruction.

Recommendations

1. A five-year plan for the purchase of instructional equipment should be prepared.

2. Debt service funds should be used for the purchase of capital equipment whenever possible.

EDUCATIONAL PERSONNEL

Assumptions:

1. Reallocation of personnel and resources will be needed to meet requirements for new, expanded, or modified instructional programs or services and increased operating costs.

Recommendations

1. All MATC divisions should effectively utilize all resources to obtain greater benefits from the existing resource base through reallocation of resources and personnel.

2. A schedule of Call Staff salaries should be prepared that differentiates on the basis of need and market factors to enhance MATC's ability to employ quality instructors.

CHAPTER VII

EDUCATIONAL PLANNING ISSUES

Discussion by the MATC Board, Cabinet and Planning Task Forces highlighted some significant educational issues that require study and specific recommendations to alleviate problem areas. Issue papers including background information, alternatives and recommendations have been prepared for each of the four major issue areas identified and are included in this chapter.

ENTRANCE REQUIREMENTS FOR INSTRUCTIONAL PROGRAMS

Background

At MATC, as in community colleges throughout the country, the policy of open admissions is a basic premise of its mission. Recently, however, the policy, as it has been implemented and practiced, is being seriously reexamined. In evaluating the creditibility of its programs and the quality of its graduates, a number of problems have surfaced.

1. The attrition rate is an area of concern in many programs.

2. The quality of graduates is lowered when the range of student achievement is extremely broad.

3. The learning skills of entering students are inadequate. Over one-third of the diploma and associate degree students are deficient in one or more of the three R's -- reading, 'riting, 'rithmetic.

4. Higher entry-level skills are being demanded of students in programs with high technology components. These components are being added to the technical, health, business, and graphic arts curricula.

5. A complicated matrix outlining "General Admission Requirements" has not generated reliable data. The documents which are collected are often outdated, incomplete, and of questionable value. For example, the high school transcript frequently does not accurately describe the past achievement nor the present potential of the student.

6. The majority of the associate degree students are enrolled in a program of their choice if they present a high school credential showing a "C" average. Many students make an unrealistic choice of a program because they are unaware of the academic background required. Consequently, the faculty later has to screen out those students who lack the skills to comprehend the course content, perform the math calculations, or write the assigned papers.

7. Finally, the need to establish more specific entrance requirements was the most frequently cited recommendation when 43 programs were reviewed by the Department of Research, Planning, and Development ("Report on Programs Evaluated: 1982-83," dated September 1983, p. 13).

One of the essential purposes of an open admissions policy is to give individuals who are denied admission elsewhere a chance to further their education. Inherent with an open admissions policy is the obligation to provide intensive guidance and counseling in terms of helping students select a program appropriate to the skills they bring. Moreover it is important to students that they succeed in their initial attempt in a college program.

Finally, the success of a competency testing program will to a great extent be determined by the quality of skill-building programs developed and administered by the instructional arm of the college. At present, the college has numerous remedial instructional programs located in different departments and divisions. These include Crossover, Adult Basic Education, the Adult High School, and other smaller instructional units. One suggestion is to review these various skill-building programs and perhaps integrate them into three comprehensive skill-building centers, one for reading, another for writing, and a third for math.

Recommendations

IN VIEW OF THE EXISTING PROBLEMS, IT IS RECOMMENDED THAT ENTRANCE REQUIREMENTS SHOULD BE BASED UPON COMPETENCY TESTING AND ESTABLISHED FOR ALL DIPLOMA AND ASSOCIATE DEGREE PROGRAMS.

The major steps in implementing this recommendation include the following:

1. Revise and simplify the admissions application and procedure.

2. Develop a model for conducting competency testing of diploma and associate degree students.

3. Determine entrance requirements and equivalent test scores.

4. Conduct a competency testing program which will make results available shortly after completion of testing. Optical Mark Reader answer sheets can be scored rapidly, and the results placed into the host computer simultaneously for immediate retrieval.

5. Immediately complete the registration process as soon as a student qualifies at or above the requirements for his/her program. At some colleges, advisors do this work. Faculty would be utilized to fulfill this advisor role.

6. Orient and assign those students whose test scores are below the requirements into the appropriate skill-building or developmental classes. This should be conducted by competently trained counselors. It is usually done in group settings.

7. Develop a flexible, comprehensive and integrated academic skill-building program. Progress in the skill-building program should be tested periodically to determine improvement and readiness for entry into diploma or degree level programs. This program should include assessment and advisement, counseling and tracking of students.

REMEDIAL AND BASIC EDUCATION

Background

The Milwaukee Area Technical College maintains an extensive level of remedial and basic education activities. The Adult High School provides subjects needed for college entrance or as prerequisites to a program. The Basic Education and Adult Basic Education Departments provide instruction in academic or essential skills in reading, writing, and arithmetic from a level of illiteracy through high school. This type of instruction also includes General Educational Development for high school diploma equivalency, special programs for the handicapped and coping skills for applying basic skills to consumer economics, occupational knowledge, health and others.

In addition to basic education, the postsecondary General Education Division maintains a remedial program for preparing students for entry into occupational programs. This program titled Crossover is an associate degree program which emphasizes communication skills, mathematics, and social sciences for persons who are academically disadvantaged.

In our Student Services Division, Special Needs Department, we maintain a student tutoring service, which is not restricted to associate degree level, but may also include some tutoring in basic skills.

In addition, the Computer Resource Center provides computer-aided remedial instruction to students throughout the instructional divisions. Presently this type of instruction constitutes approximately 15% of the total CRC operation.

The General Education Division maintains a communications laboratory which is used, in part, for remedial and basic skill development as part of the communication skills classes. The laboratory is also equipped to provide some remedial work in speech. Much of the remedial work is competency based.

Lastly, the Instructional Services Division operates the TV High School which provides preparation for the GED test sequence. This program maintains a set of video tapes of all of the parts of the series, and these tapes are available in the District Library.

Planning Alternatives

1. Establishing entrance requirements for occupational programs would require that a comprehensive remedial/basic skills component be developed to which students can be referred when they encounter academic difficulties. Such a plan would require expanding remedial services District-wide.

2. The remedial and basic skills "Centers" located throughout the District may be left located in various divisions and locations, or these "Centers" may be partially combined into one comprehensive center and students referred to one central location.

3. The planned new building for the Downtown Campus will free enough square footage to allow for the development of a Remedial/Basic Skills and Tutorial Center. Many of the remedial activities occurring in the District could be located in this center which would permit individual Instructional Divisions to assign faculty on an as-needed basis. The centers would consist of a variety of facilities with different room sizes and delivery systems.

Recommendations and Plan

The Milwaukee Area Technical College should develop, design, implement, and maintain Remedial/Basic Skills Centers for use by students who indicate a need for and would benefit from comprehensive, centrally-located facilities. These centers would be created by consolidating and combining the variety of instructional centers, labs, and resource rooms to provide the following Remedial/Basic Skills services:

1. A comprehensive Math Center made up of instructional labs and classrooms which would provide remedial, basic skills, and academic math instruction currently housed in various locations at the Milwaukee Campus. This Center would utilize a competency-based format and would provide self-paced, individualized instruction to the students. Group instruction would also be accommodated.

2. A comprehensive Reading and Communications Center made up of instructional labs and classrooms formed by combining the resources from the present Communications Lab, Reading Labs, the Adult High School Reading Lab, and the Reading Workshop. This center would consist of a variety of facilities including a large resource center and individual classrooms.

3. Tutorial Services coordinated with the Crossover Program to provide guidance and instruction to those students who need specialized, narrow-band remediation.

Staffing for these programs would be accomplished by reassigning current faculty or securing new faculty through faculty reductions in other instructional departments. In addition, tutorial staff would continue to be recruited from the student body.

PLAN FOR COMBINING BASIC SKILLS, REMEDIATION, AND ACADEMIC INSTRUCTIONAL CENTERS FOR MATHEMATICS AND READING/COMMUNICATIONS

A. Math Center

Background Information - At the present time there are a number of Math Learning Centers located at the downtown campus. These include the Tech Math Center, Associate Degree Math Workshop, and the Adult High School. In Addition, there is a basic math component within the Adult Basic Education Program. Since these separate facilities may contribute to some duplication of both facilities and faculty and staff, this proposal will address the advantages of developing a centralized Math Center to accommodate basic skills remediation, and academic instruction in High School, Adult Vocational and Associate Degree programs. The level and quality of combined services provided has yet to be defined based upon the number of students requiring minimum entrance competencies remediation, and the flow of students in the regular mathematics courses.

Availability of Facilities - The decision to build a new Student Services building at the downtown campus will necessitate the moving of the programs housed in the M, X and G Buildings upon the completion of the new building. The C Building Library and adjacent rooms C353 and C332 will be renovated to house a combined Math Center. Three areas of mathematics instruction may be housed in this facility: 1) Basic Skills; 2) Remediation; and 3) academic instruction. The Basic Skills and ABE math component will be located in the old library portion consisting of approximately 2,400 square feet. Math faculty and staff from the ABE and Adult High School, plus any augmentative call staff to be used for basic skills instruction may be assigned to this level. The remaining 2,400 square feet could serve as the existing Tech Math Center and the Math Workshop. This area could provide both academic instruction and remediation and may require some scheduled classroom support. Faculty and staff may be assigned to this center from the Tech Math Center and the Math Workshop. This combining of facilities and staff should be completed by the beginning of the Second Semester in January 1987.

Equipment/Facilities Impact - Inasmuch as basic skills and remediation in mathematics lends itself well to Computer-Assisted Instruction, the math learning center should have microcomputers assigned for use by students as needed. It is not anticipated that any other additional equipment will need to be purchased or assigned to the new center. Students would be encouraged to utilize the District's microcomputer labs for routine calculations and computing.

B. Communications/Reading Workshop

Background Information - At the present time, as with the individual math centers, reading and communications facilities are housed throughout the campus. This includes the Reading Workshop in the Adult-Vocational program, the Reading Workshop in the Associate Degree program, the Reading Workshop in the Adult High School, the reading component of Adult Basic Education and the Communication Skills workroom. Also, as with the math areas, there may exist duplication of both facilities, faculty and staff.

Availability of Facilities - Beginning in January 1987, the Student Services, Placement, Testing and Counseling areas presently located in the C Building will be renovated, along with the cafeteria, to provide a combined Reading/Communications Center of approximately 16,500 square feet. As with the Mathematics Center, the level and quality of service provided has yet to be defined based upon the number of students requiring minimum entrance competencies and the flow of students in the normal programs.

C. Vacated Classroom Facilities

The Reading Workshop and Basic Education classrooms in the C Building may be vacated. This will total 7 classrooms. In addition, the Communications Lab could be made available with an additional 4 classrooms. The Associate Degree Reading Workshop facility would make 3 classrooms available. The Adult High School Reading Labs would result in 2 additional classrooms. It is anticipated that by January 1987, 16 additional classrooms could be available for daily ongoing scheduling and programming of classes.

EVALUATION OF INSTRUCTIONAL PROGRAMS

Background

Program Evaluation procedures are the responsibility of Research, Planning and Development. Procedures for Program Evaluation have been developed utilizing a Program Evaluation Committee made up of the MATC Administration and Faculty.

Programs are scheduled for review of the Committee starting in January of each year. Each Program will be evaluated on thirteen criteria.

Criteria	Responsible Department
1. Enrollment Rate	Research
2. Graduation Rate	Placement
3. Graduate Placement in Appropriate Field	Placement
4. Employer Requests/Labor Market Info.	Placement/Research
5. Advisory Committee Recommendations	Dean/Advisory Committee Chair
6. Cost per FTE	Research
7. Productivity Ratio	Research
8. Relation to MATC Mission	Research
9. Curriculum Currency	Dean/Research
10. Physical Facilities	Dean
11. Equipment	Dean
12. Impact on Target Population	Research
13. Availability of Programs from Other Agencies	Dean

Procedure

1. After review of data and worksheets of the thirteen evaluation criteria by the Program Evaluation Committee, recommendations for the program are prepared.

2. The Committee's recommendations are discussed with the Dean responsible for the program and a course of action is developed. The Director of Research, Planning, and Development and other Committee members may be involved in this discussion.

3. The recommendations and course of action are then sent to the Executive Dean for review.

4. An Annual Summary Report is prepared for the District Director for review.

5. A Final Report is prepared and distributed to the MATC Board, Administration, and Staff.

Planning Alternatives

1. All instructional programs would be evaluated completely each year.

2. All instructional programs would be evaluated each year utilizing annual data available for each program, but complete evaluation would be limited to approximately 20% of programs.

3. All instructional programs would be evaluated each year utilizing annual data available, but complete evaluation would be limited to those programs that have some deficiencies as indicated by review of annual data.

Recommendations

It is recommended that all instructional programs be evaluated each year using annual data for the following criteria:

1. Enrollment Rate
2. Graduation Rate
3. Graduate Placement in Appropriate Field
4. Employer Requests/Labor Market Information
5. Cost per FTE
6. Productivity Ratio
7. Impact on Target Population
8. Availability of Programs from Other Agencies

In addition, approximately 10 to 20% of instructional programs be given a complete evaluation annually. Selection of programs to be evaluated would be based on recency of evaluation or because of deficiencies identified.

NOTE: SEE APPENDIX B - Five-Year Average of Enrollment, Graduates, and Placement Percentages of MATC Associate Degree and Diploma Programs.

CRITERIA FOR DETERMINING EDUCATIONAL PROGRAMS BY CAMPUS LOCATION

Background

In preparation of the 1973 Master Plan, coordinating deans and regional administrators prepared projections of potential enrollment by program and made suggestions regarding where programs would be offered in the District. These recommendations were reviewed by a special Master Plan committee and a plan for location of programs was prepared, approved by the MATC Board, and implemented. As indicated in the 1973 Master Plan, most facilities at the North and South Campuses were replacements of facilities at Cudahy and South Milwaukee in the South, and Port Washington in the North, or were replacements of inadequate facilities at the Milwaukee Campus.

In the development of the 1973 Master Plan, the following guidelines were developed:

The Milwaukee Campus will continue to offer almost all the present programs and courses, with a few exceptions in the Technical and Industrial and Agribusiness areas. Graphic Arts, Health Occupations, Television and Adult General Education will be specialties of the Milwaukee Campus.

The West Campus will continue to offer a variety of programs and courses that best utilize the facilities of the West Campus and meet community needs.

The South Campus will specialize in Technical and Industrial and Apprentice programs.

The North Campus will specialize in Agribusiness and Business programs.

MATC will continue to use high schools and community centers in the District to supplement campus centers in accommodating evening students.

Some changes in the guidelines that have developed since 1976 are as follows:

1. Expansion of Business programs has occurred at all Regional Campuses and has resulted in large increases in enrollment.

2. Adult General Education is now offered at the three Regional Campuses.

3. The Funeral Service program will be transferred to the West Campus in the Fall of 1985.

PROCEDURES AND CRITERIA

Recommendations for the allocation of programs and courses to Regional Campuses and evening centers are made by coordinating deans and regional administrators for approval by the Executive Dean and District Director. A list of approved courses to be offered at campuses and evening centers throughout the District is reviewed annually and revised.

Criteria that are utilized to determine allocation of programs or courses are the following:

1. Non-duplication of course offerings within a Region unless there is sufficient student demand and costs that are not prohibitive.

2. Availability of adequate facilities, equipment, materials and faculty.

3. Accessibility of campus or center if only one or a few courses of a certain type are offered in the District.

4. Analysis of enrollment trends by program and course.

5. Types of industry in each geographic area.

6. Type of facilities constructed in 1976-77 on each Campus.

It is anticipated that program and course offerings at Regional Campuses will continue to be increased whenever possible. Where enrollments are sufficient and facilities are available, efforts should be made to allow students to complete their program of study at the initial campus of attendance if it is economically feasible.

OUTREACH, CUSTOMIZED TRAINING, AND TECHNICAL ASSISTANCE

Background

Milwaukee Area Technical College can be proud of the role it plays in the community's economy. The school has a long history of providing business and industry with the vitally needed trained work force. Our comprehensive Outreach efforts will continue to serve these needs. However, many changes are facing us in the 1980s and on into the 1990s.

MATC Faculty during a recent Coordination Day were advised that many factors will create changes in the work force in the 1980s and 1990s and, therefore, will dictate new approaches in our educational delivery. Some of these changes are as follows:

1. Changing technology.
2. Women in new roles.
3. Increased emphasis on productivity improvement.
4. More participation in the decisionmaking in the work place.
5. More career planning.
6. Return to basic skill education.
7. Shortages of skills and management/supervisor talent.
8. Private sector initiative for minority people.
9. More emphasis on in-house training.
10. Possible longer work careers for older people.

Now is the time of "human capital" in the sense that workers are being encouraged, if not required, to be retrained in accordance with the ever more intensive changing needs of industry and business.

MATC's Outreach Program must be inclusive and be able to address the many concerns facing business and industry. For example:

1. The need to be more responsible to adult retraining and upgrading will be reflected by our Continuing Education Program. Technological advancements will cause existing skills to be valueless creating the need for employees to master new skills, or update old skills, or train to qualify for new positions.

2. It is estimated that 85 to 95% of the workers do not require a four year college degree. Therefore, MATC must continue to stress our mission to provide Associate Degree, Diploma, and Certificate programs and courses.

3. MATC must continue in its firm commitment to Cooperative Education and the belief that learning takes place in many different settings--both in and outside the classroom. Cooperative Education provides the opportunity for MATC, the student, and the local industrial and business community to combine efforts to provide the students with a relevant and meaningful educational experience.

4. Small business concerns will need to be highlighted. In Milwaukee County alone, there are 19,427 established businesses. Over half of them have one to four employees. Ninety-three percent have fewer than fifty employees. Ninety-nine percent of Milwaukee County firms have fewer than 250 employees. The market to serve small business is abundant. MATC will need an ongoing assessment of policies and practices to make certain that the school can provide courses with variable time in class to answer the immediacy of small business needs. MATC must pursue the development of general courses relating to small business and, at the same time, develop specific courses relating to individualized concerns.

5. MATC must cooperate with community-based organizations (CBOs) to assist persons who are not able to enter the world of work due to basic skill deficiencies, lack of motivation, hazy vocational goals, and inadequate job-seeking and job-holding knowledge. CBO clients should be a significant source of students for MATC occupational programs.

6. The specific needs of women who may be entering a career for the first time or, perhaps re-entering after children are grown, will stimulate the need to provide innovative and flexibly timed training programs.

7. The training of apprentices with strong emphasis upon fundamentals will maintain its priority. Advisory Committees will play an important role in providing the directions that MATC should take in each of the apprenticeship areas. It will be equally important to attract more minorities and women into apprenticeable trades.

8. Business and Industry Relations must work with the offices for Prospective Students, and Placement. We must ease the way for persons already employed to register and enroll in classes, as well as address the time of day at which these classes are offered. Placement serves an important role in securing positions for our students within the industrial and business community.

9. In the past, MATC has had many requests from employers and agencies to assist in the development of individualized programs and courses. The demand is anticipated to increase by at least 50% in the future. The services offered by such a comprehensive program requires systematic planning and controls to be effective. This will involve MATC directly with employers in planning and implementing the firm's employee development efforts.

Planning Alternatives

1. New and innovative technology is emerging and, with it, the need for motivated and knowledgeable new workers. Given these accelerating technological changes, the training methods of the 1960s and 1970s will no longer be adequate. The times call for a bold, innovative approach to training if MATC is to provide a more sophisticated work force for Milwaukee area businesses and industry. If technical education lags behind, the Milwaukee area economy will suffer. Success depends upon the availability of trained technicians to implement new ideas for changing job requirements and different classifications.

2. Currently the vocational technical system is preparing citizens for occupations that are in demand such as machine tool operators, electricians, maintenance mechanics, allied health technicians, office employees and data processors. These job classifications will continue to exist but with new skill and competency requirements. It will be important for maintenance personnel to be able to communicate with a computer and for tool and die makers to understand the workings of a computer graphics terminal.

3. Technical education has to be planned with an eye on what technology is anticipating for the next 10-15 years. New job categories will be emerging and with this the need for a new kind of worker who must know more about electronics, chemical processing, math and computer science.

   Emphasis must be placed on long-range planning to match available skilled people with future needs of business and industry. The planning for future training needs must begin at once. Programs must be developed to upgrade/retrain employees. Long-range strategy must be developed to train faculty, acquire proper equipment and develop guidelines in planning course development and curricula.

In order to meet planning and implementation needs, a Milwaukee Area Technical College Business and Education Liaison Council has been formed. This council recruited members from industries identified as emerging technologies, traditional manufacturing, service, government, public schools, and MATC. Along with input from the advisory committees, the above representatives would focus on the following tasks:

1. Evaluate changes in work force.

2. Assess the impact of future technology and compare with MATC's Program Development procedures.

3. Devise method for utilization of industry locations for training.

Recommendations

The Business and Education Liaison Council should be utilized to aid in identifying those areas where specific outreach training would be beneficial. This would include increasing outreach instruction in emerging technologies such as flexible manufacturing, laser applications, computer-aided design and others. Also, business and industry should be served by seminars and workshops in such areas as automated office procedures, innovative trends and procedures, basic communication skills, and other related skills. In addition, MATC should expand the level of technical assistance provided to local business and industry to aid such companies in developing a skilled and efficient work force.

An MATC Outreach Management Committee will be utilized for District-wide planning, coordinating, and monitoring of outreach activities. Conference facilities for use by business and industry programs should be developed at the Milwaukee Campus. Regional Campus facilities should also continue to be used and modifications for better utilization should be made when appropriate. Continuing education staff should be maintained in each instructional division--Business, Graphic Arts, Health, Home Economics, Technical and Industrial, and General Education.

HIGH SCHOOL CONTRACT PROGRAM AND ADULT HIGH SCHOOL

In Wisconsin, the responsibility for providing vocational education for students in grades K-12 rests with the Wisconsin Department of Public Instruction. The Department of Public Instruction has delegated its responsibility to local school districts who, through special application, apply to the Department of Public Instruction for special vocational funding. It has been only since 1967 that high schools have had an opportunity to provide vocational education to students, except in some specialized areas, such as home economics and agriculture. Presently, all categorical funding for high school vocational education is derived from federal sources. State support for high school vocational education is received by school districts through the State Equalization Aids Formula. Equalized aids do not recognize vocational education for special categorical funding.

The law which allows VTAE schools to provide vocational opportunities to high school youth is contained in Wisconsin Statutes, Chapters 118 and 38.

Chapter 118.125(2)(i) states, in part, that District VTAE Boards in which the high school is located shall, upon request, be provided names of students who have withdrawn from public schools prior to high school graduation.

Chapter 118.125(1)(c) states further that a child excused from public schools is to be informed of the availability of programs within vocational, technical, and adult schools and that the child has a right to be admitted to the VTAE school upon request. Chapter 38.001(2)(a) states that the District VTAE Boards shall actively coordinate with the Department of Public Instruction and local school boards the responsibility for providing vocational training to pupils attending high schools and for those who have dropped out of high school. Chapter 38 continues to state that local VTAE boards shall report to public boards of education steps taken to satisfy statutory responsibility dictated in Chapter 38.

Meeting the challenge and dictates of Chapters 118 and 38 of the Wisconsin Statutes, the Milwaukee Area Technical College Board of Directors has taken several steps to provide opportunities for high school students who have an interest in vocational subjects and those who have withdrawn from high schools. Services provided by MATC fall into three general categories: 1) pool funding; 2) contract slot-ins; and 3) contracted classes.

1. Pool funding is a relatively new concept in Wisconsin. It had its beginning in the 1982-83 school year. A portion of federal monies received by the State of Wisconsin is provided to the VTAE System and the Department of Public Instruction for the purpose of providing high school vocational instruction. VTAE schools have a responsibility of coordinating vocational projects developed by local boards of education. Instruction may be delivered either on-site at an MATC facility, at a board of education facility, or at an off-campus site.

2. Contract "slot-ins" is a process whereby local school districts contract with MATC to provide vocational instruction on-site at one of MATC's Regional Centers. MATC operates four Regional Centers; they include the Main Campus - Milwaukee; South Campus - Oak Creek; North Campus - Mequon, and West Campus - West Allis. The cost to the school district for student slot-ins during the 1984-85 school year is $2.41 per instructional hour. This cost is based on an average cost per student to MATC and is paid by local boards of education. Boards of education receive partial reimbursement from the Department of Public Instruction through equalization aids. Students are slotted into either the full-time day program or evening program. Slotted students are expected to matriculate through high school with their graduating class.

3. The third form of contracted services between MATC and local boards of education involves providing instruction to an entire class. In these arrangements, boards of education may contract with MATC to provide an instructor and instruction in a specific vocational field to a class of high school students. These vocational courses are selected from a wide array of offerings. Instruction may occur either on-site at a local high school or on an MATC Campus. The instructors of contract courses are to have full vocational certification. However, responsibility for the instructors' employment may rest with either the local board of education or MATC.

With recent changes in Wisconsin Statutes Chapter 38, it appears that MATC's association with local high schools will increase. Students will be enrolling in vocational programs at an earlier age. MATC has gained new responsibilities to provide services and programming for high school age students who either are enrolled in or have withdrawn from high school. This responsibility will necessitate that creative avenues be explored for providing instruction to younger adults. It is expected that some increase will occur in pool funding projects in the future and that more students will be "slotted in" to existing vocational programs.

The Adult High School functioning at MATC is unique and the only one in existence in Wisconsin. The Adult High School enjoys North Central Association accreditation and is designed to serve the needs of those adults have not completed requirements for a high school diploma. The Adult High School at MATC serves approximately 1,000 students yearly. It has a staff of 22 teachers, and a department head, and is under the jurisdiction of the Director of High School Relations. With recent changes in the State Statutes, Chapters 118 and 38, it may be assumed that younger students will be seeking opportunities provided through MATC's Adult High School. Discussions are now under way between MATC and public school officials, with the intent of improving articulation between diploma-granting institutions which may enable potential high school dropouts to successfully complete high school graduation requirements.

Assumptions

Based on the foregoing discussion, it may be reasonable to assume that several assumptions concerning MATC's future involvement with local high school districts can be made. Some follow:

1. Recent changes in State Statutes, Chapters 118 and 38, will dictate that MATC become involved earlier with high school students who are about to drop out or withdraw from high school.

2. A program of cooperation between MATC and public school districts within the boundaries of MATC has been in existence for a sustained period of time and will continue.

3. MATC will, of necessity, become more actively involved in responding to the needs of potential high school leavers.

4. MATC will be required to become more active in soliciting support and cooperation from local school districts.

5. The age range for vocational services to potential high school leavers will be expanded to age 21. There will be a need for increased coordination, sharing of responsibility, financial resources, and cooperative projects to serve this diverse population.

6. There is a need at MATC to consider further consolidation of all services available to high schools.

Recommendations

1. MATC should establish a format whereby increased cooperation between MATC and public high schools will occur.

2. Advisory committees consisting of public school officials should be formed to help plan for future joint efforts between MATC and public schools.

3. Articulation projects begun at MATC for program development and coordination should be increased.

4. Creative funding sources for cooperative projects betwen MATC and public high schools should be developed.

5. There should be developed an interface between MATC, the public high schools, and the private sector to encourage relevant vocational program development.

HIGH TECHNOLOGY PROGRAMMING

Background

High technology requires new occupational programs, new courses and new skills integrated in existing courses. All teaching and development is a responsibility of each instructional division. The development of high technology courses and programs involving use of computer resources is managed by the Instructional Services Department, to coordinate development of curriculum, faculty, teaching materials, and resource centers. High technology plans for new programs, services, activities, facilities and equipment by instructional division follows.

An attempt to locate and label what is to be considered "high technology" at the Milwaukee Area Technical College is dependent on a definition. For purposes of this report, high technology is defined as:

> "A programmable system designed for the input, storage or retrieval of data required for: The control of machine tools, engineering analysis, statistical evaluation, search for information, editing of the written word, robotics, graphic arts, medical systems, other service industries, and related systems or procedures."

Although the term "high technology" appears to have only recently emerged it, in fact, describes an activity which has been ongoing at MATC since 1961 when the first digital computer (IBM 1401) was installed. The period 1961-1981 has been characterized by continuous adding to and the upgrading of a rapidly expanding core of hard- and software throughout the institution in both instructional and administrative divisions and departments.

High technology in the Business Division is concentrated in the areas of Word Processing, Business Data Processing, and Information Processing. Microcomputer technology, in the form of job-related applications, is in the process of being incorporated into a broad range of accounting, marketing, and other Business Division courses.

Business courses and programs are being revised to reflect the changes in technological skill requirements of local businesses and to better equip our students to meet those requirements.

The Business Data Processing program was initiated in 1963 and has evolved by considerable additions of equipment as the technology has increased. A new IBM mainframe computer was acquired in 1984 to replace a 1976 Burroughs. The program will be expanded at each of MATC's Regional Campuses.

Computer Labs have been developed at each of the Regional Campuses and new programs and courses utilizing microcomputers have been initiated such as Computerized Accounting and Business Office Automation.

The use of stand-alone programmable systems in the General Education Division is concentrated in the Mathematics and Science Departments. The systems are utilized for calculations and some programmed learning activities. In many cases, where routine drill is needed, the General Education students are sent to the Computer Center for instruction. This allows the systems in the Math and Science Departments to be free for instruction-related or instructional support.

The Printing Department is at the cutting edge of high technology in the Graphic Arts industry. MATC has three phototypesetters, two of which have been donated by the Mergenthaler Corporation. Additionally, we have a complete library of 1,500 fonts for these phototypesetters. These phototypesetters may be driven in several different fashions. We still have approximately six paper tape punch keyboards that can drive the phototypesetters. However, our current methodology is to drive the phototypesetters by means of Zenith microcomputers. Our Phototypesetting Lab has acquired 20 stand-alone Zenith microcomputers. Some of these are directly connected to the phototypesetters for direct drive. On the others, floppy disk drives are used for information storage, and then the floppy disk is used to drive the phototypesetter.

A new high technology area of instruction in the Graphic Arts Division is Computer Integrated Pagination and Design. Equipment for Computer Integrated Pagination and Design has been purchased in part through a grant from the State Board VEA Set-Aside for High Technology.

The Graphic Arts industry is the third largest employer in Wisconsin. Nationally, it ranks fourth among the major industries in the total number of people employed. In the past five years, the industry has shifted from traditional production methods to computer/computer-assisted production processes. The addition of the Pagination process and design will enable us to prepare students for existing and new jobs. The new equipment will also be used to serve MATC in the production of printed materials. Students will be able to innovate designs in combination with the Compugraphic typesetter.

Computer Graphics and all Graphic and Applied Arts programs will be expanded into Commercial Art and other graphic arts courses. High tech innovations in the Visual Communications area are focused around video and video-related equipment. The Visual Communications Program will be restructured into a Visual Communication-Video Program.

The use of high technology equipment and techniques will be incorporated into present programs and courses in Health Occupations. Two new activities have been funded through the State Board VEA Set-Aside for High Technology - Diagnostic/Medical Imaging Technician, and Pulmonary Functions Technology. A competency-based Certificate program for a Diagnostic/Medical Imaging Technician to incorporate the new scientific imaging concepts into courses will provide updating for radiographers.

The Pulmonary Functions Technology project will provide advancement-level training for students currently enrolled in Associate Degree Respiratory Therapy programs and updating for Respiratory Therapy practitioners.

The high technology era began in the Technical and Industrial Divisions in 1963 when the Computer Science program was developed. This allowed for the purchase of additional programmable systems to implement instruction. By 1966, the first Numerical Control machine was installed and some national workshops were hosted by MATC. In 1972, the first DEC GT40 Computer Graphics terminal and plotter were installed and five years later (1977) a National Science Foundation proposal was funded to buy additional terminals in a variety of areas. In 1978 and 1979, MATC and the General Electric Company began discussions on the need to supply computer graphics technicians. As a result, an NSF proposal was written and funded for $250,000 for three years for the period June 1, 1980 to June 1, 1983. The Computer Resource Center was developed in 1975 for CAI and CAI became the center for Computer Graphics.

Flexible Manufacturing Systems (FMS) Lab was established in 1983 in the MATC T Building. The construction of this lab was part of a longer-range plan for development of facilities for high technology programs. The following construction has taken place or is in the process of taking place to accommodate high technology.

1. All welding shops from the T Building have been moved to the F Building on North Fourth Street with a reduction in the number of weld shops from three to two.

2. Numerical Control and Flexible Manufacturing Systems facilities have been expanded on the first floor of the T Building in the area vacated by a weld shop.

3. A Plastics Lab and related facilities have been developed in the second floor of the F Building.

4. Computer Graphics facilities have been expanded on the third floor of the T Building. Drafting rooms utilized for this expansion were relocated into the former welding shops on the second floor of the T Building.

5. Electronics Labs in the T Building have been renovated and updated.

A $300,000 three-year grant has been received from the Fund for the Improvement of Postsecondary Education (FIPSE) starting in 1983 which has made it possible to develop new materials, courses and programs in the area of Flexible Manufacturing Systems. FMS has been integrated with CAD.

MATC has become a national leader in high technology and is distributing course materials and computer software to educational institutions. In 1983-84, nearly $250,000 in sales to over 300 institutions were made. It is projected that $500,000 in sales in 1984-85 will occur and these will continue to grow as new products emerge. The revenue generation should help sustain continuous development of new course materials and maintain the leadership position.

Recommendations

1. Develop a strategy to serve industrial retraining courses and workshops. MATC needs:

    a. a method to schedule high technology equipment as alternated between regular instruction and retraining.

    b. to invest in regular assigned faculty development of high technology retraining workshops.

    c. to schedule faculty to teach these workshops and courses as needed.

    d. to develop an automated scheduling system that includes hardware, faculty, and rooms.

2. Develop the high technology centers, such as the CAD Center, as an open center serving the community as a technical information resource for economic development and making available high-cost work stations with up to 80 hours of open student scheduling. Paraprofessionals staff the centers assisting students and providing technical support. The goal is to make the paraprofessional cost-effective by earning FTE for the open lab by either one or both of the following:

    a. Allocate FTE credit for time student spends in the open lab.

    b. Utilizing paraprofessionals in open labs rather than instructors may reduce course teacher load by replacing lecture with assigned lab time to conduct demonstrations/quiz activities in a classroom preparing students for open lab and as follow-up. Lab visits and classroom demonstrations are to be included.

3. Instructional Services will refine instructional computing policies and procedures for centralized support system including all computer acquisition and use. To encourage development of instructional areas in high technology, the instructional department must be supported by the consignment of hardware and software plus provide technical assistance until a plan for long-term operation is approved.

4. Develop or acquire low-cost emulators of high-cost industrial work stations for teaching. MATC CAD is an example. (Computerized Machining projected for 1985 and Robotics projected for 1986.) Industrial-type labs are more cost-effective for advanced skill type courses used in second year of technical programs and, principally, for retraining of the industrial worker.

5. Graphic Communications and Word Processing need to be expanded into open learning centers with paraprofessionals and sufficient work stations.

CHAPTER VIII

SUMMARY OF INSTRUCTIONAL DIVISION AND DEPARTMENT PLANS

PROPOSED NEW INSTRUCTIONAL PROGRAMS
INSTRUCTIONAL DIVISIONS

Background

The business and industrial environment in the MATC District has undergone significant and perhaps long-lasting changes during the past three years. Some of the traditional heavy industries so characteristic of Southeastern Wisconsin have demonstrated a trend to consolidate, reorganize, relocate, or cease doing business entirely. The result has been to produce a persistently high number of displaced workers whose usual jobs have disappeared. For example, between 1979 and 1981, 43,000 manufacturing jobs were lost in Wisconsin. Concomitantly, new occupations have emerged, some associated with what is generally named "high technology," while other jobs are developing in the more traditional but rapidly-growing service industries. In support of this, studies indicate that through 1990 service jobs will increase between 30 and 41%. Furthermore, "Wisconsin executive and non-Wisconsin industrial developers identified labor availability and productivity, along with the State's voc/tech education system, as major strengths in Wisconsin's business climate...."

MATC has been responding to these changing conditions particularly in the area of "high technology." Beginning in 1980, a Computer-Aided Design (CAD) system was initiated by integrating this technology into a Mechanical Design Technology program. This CAD system was developed under a National Science Foundation grant which funded three years of developmental work. The result is a completely operational CAD system which is being used by a number of MATC technical and industrial programs.

In 1983, the Fund for the Improvement of Post Secondary Education (FIPSE) agreed to fund a Computer-Aided Manufacturing (CAM) component, thus allowing for the completion of the CAD/CAM sequence. This three-year cycle will cover the period 1983-86, and a complete flexible manufacturing system will be developed utilizing robotic control. In addition to the specific computer-based application cited above, a complete Computer Graphics laboratory has been developed for utilization by the instructional divisions, such as Health Occupations, which has developed a computer-aided Pharmacy Technician program; Graphic Arts which has integrated computer-based typesetting into the Printing program; and the Business Division, which has produced computer-aided instruction in keyboarding, microprocessors, and office machine utilization.

However, new technologies and methodologies keep emerging and the quest to maintain a "state-of-the-art" for instructional programs must continue. In order to accomplish this, the instructional divisions have developed long- and short-range plans for developing new programs to serve not only high technology, but to maintain and improve traditional Service and Health Occupations as well as Basic Skill and remedial Instruction, and General Education. The following is a summary of new program plans, by division, through 1990.

1. Human Resources Services, Future Skill Needs Assessment of Selected Metropolitan Milwaukee Business and Industry, May 1983, p.3.
2. Ibid, p.5.
3. Ibid, p.6.

AGRIBUSINESS PROGRAM

The primary objective of the Agribusiness Division is to prepare students for jobs in agribusiness, horticulture, and environmental fields. Agribusiness includes farming, marketing, and financing of food and fiber products; manufacture of power equipment and machinery; food processing and distribution of supplies and equipment to agriculture; and natural resources and environmental management. The Milwaukee area is a major agribusiness center, including a manufacturing and distribution terminal, grain processing and marketing, agriculture equipment manufacturing, and horticulture products and services.

New Service/Program Proposal:	Landscape Management (Associate Degree)
Implementation Date:	1985-86
Location:	North Campus

This program will prepare students in the rapidly growing field of landscape design primarily for single family dwellings. However, there is an emerging interest in landscape design for commercial properties as well.

BUSINESS PROGRAM

The primary objective of the Business Division is to educate students for initial employment. Inherent in this objective is the development of business leadership and decision-making ability. These purposes can best be achieved by curricula which prepare students to deal with the varied and increasing complexities of life as well as of the business world. The vocational objectives of business courses are stressed to help the student achieve greater success in his/her entry job; serves approximately 17,000 students per year.

New Service/Program Proposal:	Computer Information Systems (Associate Degree)
Implementation Date:	1986-87
Location:	Milwaukee and West Campuses

This program will be utilized to prepare people in developing computer-based information systems for such areas as word processing, spread sheet, and other related microprocessing techniques.

New Service/Program Proposal:	Small Business Training (Certificate)
Implementation Date:	1985-86
Location:	All Campuses

This one-year program will be offered in the evening only and is designed to prepare people in the day-to-day operation of a small business in such tasks as basic bookkeeping, inventory control, cash flow, credit, and other related operations.

(Business Program Cont.)

New Service/Program Proposal:	Office Automation Specialist (Diploma)
Implementation Date:	1986-87 North
Location:	1987-88 South

Will provide business and industry with persons trained in latest office technology which includes data processing, records management, and office procedures and management.

New Service/Program Proposal:	Computer Operations (Diploma)
Implementation Date:	1987-88
Location:	State of Wisconsin Prison

Program for residents of a proposed Milwaukee County Prison to train computer operators and microcomputer specialists.

New Service/Program Proposal:	International Marketing (Associate Degree)
Implementation Date:	1989-90
Location:	Milwaukee

This program is predicated on a World Trade Center being established. A World Trade Center would provide a need for persons with training in the area of international marketing.

GRAPHIC AND APPLIED ARTS

The Graphic and Applied Arts Division programs and courses are designed to provide students with marketable skills and knowledge in the communication arts and technologies. The student concentrates on one discipline; i.e., commercial art, photography, printing and publishing, or the electronic non-broadcast media. There is also an interdisciplinary semester in which the student explores the contributions that each area makes to the visual communications process in general; serves approximately 5,000 students per year.

New Service/Program Proposal:	Visual Communications/Video Technician (Associate Degree)
Implementation Date:	1985-86
Location:	Milwaukee

This program will be created by combining the present Motion Picture Technician and Visual Communications Technician programs into one program to reflect the decreased use of motion picture film in visual communications.

GENERAL EDUCATION

(Adult High School)

The Adult High School provides adults either a part-time or full-time opportunity to: 1) complete their high school education and receive a diploma; 2) take high school subjects needed for college entrance or prerequisites to a program, or 3) provide survey courses in vocational fields.

New Service/Program Proposal: None

(Handicapped)

Programs for the handicapped include support services and educational programs for: 1) Mentally Retarded; 2) Visually Impaired; and 3) Hearing Impaired. Courses offered to the Visually and Mentally Retarded students are pre-voc in nature. Students are mainstreamed into Associate Degree, Diploma, and Certificate Programs from the thre handicapped programs. All three projects served over 250 students in 1983-84.

New Service/Program Proposal: None

(Basic Education and Adult Basic Education)

MATC operates two basic education programs for adults; one that is Federally funded (in part), ABE, and one that is a part of the regular Adult General Education Division, Basic Education. The difference in funding has primarily determined the differences between the two. The Basic Education Department courses are designed to: 1) provide basic general education on an adult level. The basic academic skills of reading, writing and arithmetic are taught on three levels; 2) assist adults who have not achieved the twelfth grade level of education by preparing them for a GED (high school equivalency) certificate; Serves approximately 2,000 students per year. This number includes day and evening District-wide. Adult Basic Education is a Federally-funded program of study designed to: 1) provide adults the opportunity to attain essential skills in reading, mathematics, and language arts; 2) assist adults who have not achieved the twelfth grade level of education by preparing them for a GED certificate; 3) improve the coping skills of adults by application of basic skills to consumer economics, occupational knowledge, health, etc.; 4) assist the adult to become employable and/or prepared for further education.

New Service/Program Proposal: None

GENERAL EDUCATION

Postsecondary

The General Education Division offers a wide variety of courses through various departments to serve the needs of students of the Milwaukee Area Technical College. Students may select, on an individual basis, from a large number of general education courses to improve their civic, cultural, or vocational competence.

(General Education - Postsecondary Cont.)

For Associate Degree students, the General Education Division performs four major functions: 1) to provide a two-year liberal studies program leading to an Associate in Arts degree; 2) to offer a two-year program of college parallel courses; 3) to provide the General Education courses for all the two-year Associate in Applied Science programs of the College; 4) to offer a developmental (Crossover) program for those students who need to develop basic academic skills.

The General Education Division is a wide and diversified division helping its students to achieve self-fulfillment for themselves, their families, and their community; serves approximately 11,000 students per year.

New Service/Program Proposal:	Alcohol and Drug Abuse Technician
Implementation Date:	1986-87
Location:	Milwaukee

This program will prepare students to work as paraprofessionals in agencies and treatment centers dealing with alcohol and substance abuse clients.

New Service/Program Proposal:	Wellness Program Courses
Implementation Date:	1985-86
Location:	Milwaukee

Wellness courses will be substituted for Physical Education 101. These courses will provide MATC students an opportunity on a voluntary basis to learn and practice the latest techniques in wellness exercises and practices.

New Service/Program Proposal:	ROTC Military Science
Implementation:	1986-87
Location:	All Campuses

MATC will cooperate with four-year institutions to provide the first two years of ROTC Science for transfer. This will provide MATC students with the opportunity for a military career.

HEALTH OCCUPATIONS

Today's unprecedented technological and scientific advances, coupled with fiscal restrairts and legislative involvement in health care, have compelled health educators to take a new look at patient care and at health practices for the community's welfare.

New Service/Program Proposal:	Homemaker-Home Health Aide-Home Companion (Certificate)
Implementation Date:	1985-86
Location:	Milwaukee

This program will be a six-week minicourse designed to prepare people for health service and caring in a home atmosphere. People will be employed by public and private agencies to work in home visitation settings.

HOME ECONOMICS

The major function of home economics education has been to assist youth and adults in preparing for the responsibilities and activities of homemaking and the achievement of family well being. Although this goal will continue to be important, there are many socioeconomic changes affecting the family which require that home economics education provide training for wage-earning occupations as well. Some course offerings provide the opportunity for women or men to acquire wage-earning competencies as well as household skills. Other courses are directed toward developing new interest, appreciation, judgment, and ideals related to various aspects of homemaking.

Rapid technological changes have altered the occupational role of the individual employed in the service occupations and have necessitated reappraisal of the training, education, and personal qualifications necessary to meet the higher standards of performance presently demanded. An increasing number of people are preparing for work in the service occupations. This type of work is particularly for those who enjoy doing for others and working with people; combined, serves approximately 12,500 students per year. Although high tech is all the rage these days, service occupations are among those likely to enjoy the greatest growth during the 1980s.

It is recommended that the Family Living Education (Discussion) program be reclassified as a student services activity to utilize personnel more effectively and provide a more comprehensive service to the MATC District. This is possible because the philosophy, goals, services, and clientele of the Family Living program are somewhat similar to those of the MATC Counseling Service. The outreach nature of the program will also allow for an extension of the student service function to all points in the District. The supervision of this service, however, should remain within the Home Economics Division.

New Service/Program Proposal:	Catering Services (Vocational Diploma)
Implementation Date:	1986-87
Location:	Milwaukee

To prepare men and women to start their own business as caterers; persons who are already established in the field have the opportunity to acquire promotional techniques for increasing sales.

New Service/Program Proposal:	Industrial Sewing (Certificate)
Implementation Date:	1986-87
Location:	Milwaukee

The knowledge and job skills required in a modern industrial sewing operation are taught. Students rotate through a simulated shop operation to gain experience and skill as cutter, machine operator, service person, clean-up person, floor person, and finisher.

(Home Economics Program Cont.)

New Service/Program Proposal:	Fast Food Preparation (Certificate)
Implementation Date:	1986-87
Location:	Milwaukee

Fast food operations will account for an increasing volume of the food sales industry. There is a continuing need for trained food service personnel for these operations.

New Service/Program Proposal:	Fast Food Management (Associate Degree)
Implementation Date:	1987-88
Location:	Milwaukee

There are increasing opportunities for upward mobility to management positions in fast food operations. A management program is needed to provide trained personnel for these operations.

TECHNICAL AND INDUSTRIAL PROGRAMS

The departments of the Industrial Division offer a variety of choices to students selecting certificate or diploma programs of study. These programs are arranged so that students can progress from the fundamentals to more advanced courses in the development of job entry skills. If previous training has been received either by instruction or by experience in the field, advanced standing will be allowed toward the completion of courses leading to a certificate or a diploma. The ability of the student, the time available for study, and the number of courses that the student wishes to take are factors which determine the time required for completion of a program. Apprentice programs indicate the related courses which are to be completed by the apprentice; serves approximately 15,000 students per year.

New Service/Program Proposal:	Telecommunications Technician (Associate Degree)
Implementation Date:	1986-87
Location:	Milwaukee

This program will prepare students to design, develop, and implement wide-range communication systems including telephone, microwave, television and radio, and other media, to service a wide variety of business and industry.

New Service/Program Proposal:	Laser Technology (Associate Degree)
Implementation Date:	1986-87
Location:	Milwaukee

This program will emphasize the utilization of laser systems for medical and industrial applications.

(Technical and Industrial Programs Cont.)

New Service/Program Proposal:	Electronic Design and Packaging (Associate Degree)
Implementation Date:	1987-88
Location:	North Campus

This program will prepare students for designing and developing electronic devices for data transmission, particularly at the microprocessor level.

New Service/Program Proposal:	Microcomputer Electronics Technician (Associate Degree)
Implementation Date:	1987-88
Location:	Milwaukee

This program is to prepare technicians who will set up, install, repair, network and program microcomputers. The use of microcomputers is increasing at a rate of 30-40% per year and trained personnel are needed to maintain this equipment.

New Service/Program Proposal:	Office Machine Repair (Adult Diploma)
Implementation Date:	1987-88
Location:	South Campus

This program emphasizes the repair and maintenance of traditional office machines in addition to servicing microprocessor-based devices. Vocational Amendment Funds may be available to initiate this program.

New Service/Program Proposal:	Machine Repair (Adult Diploma)
Implementation Date:	1986-87
Location:	West Campus

This program will emphasize repair of all types of industrial manufacturing machines utilizing an individualized methodology.

New Service/Program Proposal:	Electronics Systems Technician (Associate Degree)
Implementation Date:	1985-86
Locationa:	West Campus

This program will emphasize installation, servicing and testing of state-of-the-art electronics systems that are found in industrial, medical and communication applications.

New Service/Program Proposal:	Laser Machining (Certificate)
Implementation Date:	1988-89
Location:	Milwaukee

Drilling, cutting, welding, heat treating, scribing, and marking of metals, plastics, ceramics and composites utilizing laser technology.

EXPANSION OF EXISTING INSTRUCTIONAL PROGRAMS

Background

To determine which programs might be considered for expansion, a study was made of programs with significantly large student and/or employment demand. Numerous MATC educational programs and services are in great demand and waiting lists are used to admit individuals into these programs. In areas where extensive waiting lists are necessary, the possibility of expanding these programs has been considered. Reasons for not expanding these programs generally fall into the following categories:

1. Limited job opportunities. Increasing number of graduates is not justified by number of job opportunities available.

2. Lack of facilities. Facilities are being used to capacity and additional space or funds for equipment are not readily available.

3. Lack of faculty or personnel. Faculty or other personnel are being used to capacity and funds are not readily available for additional personnel.

4. Shortages of positions for clinical or cooperative work experience. In health occupations and some trade areas, it is necessary to provide clinical or on-the-job work experience as part of the program. These positions are limited in some cases.

5. Waiting lists can be accommodated in a reasonable period of time, or these lists go up or down in length and are not predictable.

6. Program should be incorporated into a new Adult Vocational Diploma program.

In the following Table, programs which have had waiting lists in recent years are shown. Waits may vary from one semester to one or more years but, because of fluctuations in lists, a time is not indicated.

(Expansion of Existing Instructional Programs Cont.)

Recommendations for study for expansion have been discussed with each Dean supervising the program listed.

PROGRAM	Recommended Study For Expansions	Reasons for Not Expand'g
Adult General		
ABE	No	5
ESL (English as a Second Language)	Yes	2, 3
VIP (Visually Impaired)	No	3
HIP (Hearing Impaired)	No	3
Associate Degree		
Business Data Proc.	Yes	2, 3
Legal Assistant	No	1
Word Processing	Yes	2, 3
Photography	No	1, 3
Child Care & Development		
Restaurant & Hotel Cookery	Yes	2, 3
Dietetic Technician	No	1, 2, 3, 4
Dental Hygiene	No	1, 2, 3, 5
Medical Assistant	Yes	2, 3
Operating Room Asst.	No	1, 3, 4, 5
Physical Therapy Asst.	Yes	3, 4
Practical Nursing	No	1, 2, 3, 4, 5
Registered Nursing	No	2, 3, 4
Biomedical Electronics	Yes	2, 3
Computer Science	Yes	2, 3
Industrial Electronics	Yes	2, 3
Telecasting	No	1, 3
Diploma and Certificate		
Air Conditioning & Refrigeration	No	6
Auto Servicing	No	1
Auto Body	No	1, 3
Aviation Mechanics	No	1, 3
Barbering	No	1, 2, 3
Cabinetmaking & Millwork	No	1, 3
Cosmetology	Yes	1, 2, 3
Numerical Control	Yes	2, 3
Tailoring	No	1, 2, 3
Tool & Die	Yes	2, 3
Unit Clerk	No	1, 2, 3
Carpentry	No	1, 2, 3

Recommendations

The following programs should be considered for General Expansion:

Business Data Processing - High student and employment demand indicates a need for possible expansion. Future growth in computer-related employment is projected. High cost of equipment and additional staff are deterrents to expansion. Expansion is occurring at Regional Campuses.

Administrative Assistant/Word Processing - Demand for word processing skills is increasing and is projected to continue in the future. Expansion is occurring with addition of equipment at all campuses.

Computer Science - Student demand for programs and employer requests for graduates are increasing and should continue. Other technical programs require course work in computers which also necessitates additional equipment and faculty in this area.

Numerical Control - Job opportunities for this area are excellent. The industry in the Milwaukee area needs Numerical Control machine operators if it is to continue to be a leader in machinery production. High cost of equipment and repairs hampers the development of additional sections. As the waiting lists indicate, there is a great demand for this instructional program.

Tool and Die - There has been a great demand for this program for many years. Facilities, equipment, and faculty are being utilized at capacity. To expand the program, several hundred thousand dollars of equipment would be required. It is recommended that expansion of this program be at the North Campus where the present Machine Shop program should be eliminated.

Medical Assistant - It is expected that there will be increased employment opportunities with group practices, HMOs, and surgi-centers. Expansion could occur by utilizing facilities in late afternoons, evenings, and weekends.

Physical Therapy Assistant - Increasing need for home visitation by physical therapy assistants should create additional demand for graduates. To increase clinical sites available, cooperative programs with adjacent VTAE Districts should be considered.

English As a Second Language - The demand for ESL has always been great and the current influx of immigrants has increased the length of waiting lists. The program has not been expanded because of a lack of facilities and faculty.

Customized Training - There is increased demand for business, industry, and labor contract programs which should be met.

Restaurant and Hotel Cookery - Student demand and employer requests for this program have been consistently high for many years. Because of specialized facilities required, and high utilization, expansion of this program would have to be during late afternoon

Recommendations (Cont.)

and evening hours. Expansion during these hours will be studied and considered. Additional full-time instructors would also be necessary.

Cosmetology - Student demand for this program is high and placement has been good. Expansion should be considered after careful study of numbers of graduates from private schools and MATC, and future employment estimates. Program expansion would have to be in late afternoon and evening hours.

Child Care and Development - Student demand is high and MATC has become a major source of trained personnel for Child Care Center operators in the Milwaukee area. It is expected that employer needs will continue to be high, and expansion of this program during the late afternoons and evening hours should be considered.

Biomedical Electronics - Student demand for this program has always been high. Estimated employer need is expected to increase. Expansion at the North Campus as additional electronic facilities are developed should be considered.

Program and Course Offerings at Regional Campuses

To increase enrollment and utilization of Regional Campuses, the Instructional Deans have reviewed existing programs to determine those that might be expanded or transferred to Regional Campuses. Expansion is suggested only when enrollments are sufficient and facilities are available.

The majority of program expansions recommended are in the Business Division which has had large increases in enrollment throughout the MATC District. Some increase in course offerings is also recommended in the Adult and Associate Degree General Education Divisions, as well as in Technical and Industrial courses.

Associate Degree Business Programs - Demand and enrollment in Associate Degree programs has been increasing at all MATC Campuses. To meet this need the following Business programs are recommended to be expanded at Regional Campuses.

Administrative Assistant/ Information Processing - Expansion of Existing Associate Degree	1985-86	West - 2nd year South - 1st year
Business Data Processing - Expansion of Existing Associate Degree	1985-86	North - 2nd year
Legal Secretary - Expansion of Existing Associate Degree	1985-86	South - Add 2nd year

Associate Degree Business Programs (Cont.)

Medical Secretary - Expansion of Existing Associate Degree	1985-86	West - 1st year
Computer Information Systems - Expansion of Existing Associate Degree	1986-87	West & Milw.

Basic Education - The need for remedial and basic education has been increasing at all MATC campuses. To help meet this need it is recommended that additional classes in basic education be offered at the South and North Campuses.

College Parallel - Demand and headcount enrollment in College Parallel courses have declined steadily in the last ten years but have increased in the last year. This upward trend is expected to continue in 1984-85 with a slight increase. To satisfy the increased demand, it is recommended that College Parallel offerings at the North Campus, where facilities are available, be increased.

Biomedical Electronics - This program will be moved from the Milwaukee Campus to the North Campus with the start of the 1985-86 school year. Facilities are available at the North Campus that would allow for future expansion of the program. Space in the Milwaukee Campus will be available for expansion of other electronics programs.

Electrical Technology - Continued need for graduates in these programs is expected. It is recommended that the 1-year Electronic Technician program at the West Campus be replaced with a 2-year Electronic System Technician program (1985-86), and a section of Industrial Electronics or Electronic System Technician be started at the South Campus.

Funeral Service - Transfer to new facilities at West Campus in 1985-86.

Program or Service Reduction

In order for new programs to be started, or existing instructional programs expanded, it will be necessary to discontinue or reduce programs or courses based on evaluations utilizing criteria established by the MATC Board's Strategic Planning Statement. It is intended that discontinuance or reduction of programs or courses will be the principal source of faculty positions and facilities for new or expanded programs.

An evaluation procedure with prioritized services for noninstructional support areas such as Operations, Personnel and Human Resources, Administrative Services, and Community Relations should be established. It may be necessary to reduce positions in support areas in order to provide faculty and staff to expand instructional programs or services, and to initiate new programs and services.

Established Program Evaluation Procedures will be used to identify possible programs for reduction or elimination. Instructional divisions must establish priorities as to the programs and services that they offer. This should be a continuous process. The following programs or courses have been identified for possible reduction or discontinuance:

1. Discontinue ERTV Diploma Program at South Campus - 1985-86.
2. Reduce Associate Degree Nursing Program One Section (190 to 170).
3. Reduce LPN Program and eliminate Summer School.
4. Discontinue Legal Secretarial Associate Degree Program at West Campus - 1985-86.
5. Phasing out of Motion Picture Technician Program at Milwaukee Campus should be completed after the 1985-86 school year.
6. Discontinue Mechanical Drafting Diploma Program at South - 1985-86.
7. Reduce Day offerings for Real Estate and Transportation Associate Degree - 1985-86; continue with Evening only.
8. Discontinue Clerk-Typist Certificate, Regional Campuses (enroll in Word Processing).
9. Reduce Respiratory Therapy Associate Degree one section, Milwaukee Campus - 1985-86.

Additional Review for Possible Reduction/Discontinuance - 1985-86

10. Marketing Communications Associate Degree, Milwaukee Campus.
11. Marketing Management, first year, North Campus.
12. Welding Technology Associate Degree, Milwaukee Campus
13. AC, Ref., & Heating Certificate, South Campus.
14. Alterationist Certificate, Milwaukee and West Campuses.
15. Baking Diploma, Milwaukee Campus
16. Air Frame/Power Plant Aviation Mechanics Diploma, South Campus.
17. Bricklaying and Masonry Diploma, Milwaukee Campus.
18. Foundry Certificate, Milwaukee Campus.
19. Horology Diploma, Milwaukee Campus.
20. NC-Part Programmer Certificate, Milwaukee Campus.
21. Hydraulics/Pneumatics Diploma, Milwaukee Campus.
22. Pharmacy Technical Aide Diploma, Milwaukee Campus.
23. Nursing Assistant Certificate, Milwaukee Campus.
24. Health Unit Clerk Certificate, Milwaukee Campus.
25. Architectural Technology Associate Degree, Milwaukee Campus.
26. Civil Technology Associate Degree, Milwaukee Campus.
27. General Education Physical Education 101 requirement for Associate Degree Program should be discontinued.
28. The State-mandated elective requirements for Associate Degree program should be reviewed with the State VTAE Board to determine if they are consistent with the educational needs of MATC students.
29. Other programs will be identified by Program Evaluation process for consideration for reduction or discontinuance.

SPECIAL FUNDED PROGRAMS AND ACTIVITIES

Activities funded in total or in part by sources outside of MATC are included in the Restricted Revenue Fund budget. The programs and services provided by MATC through the Restricted Revenue Fund include four major categories as shown for 1983-84 and 1984-85.

	1983-84	(July 1984) 1984-85
Vocational Education Amendments	$ 879,597	$1,039,605
Adult Basic Education (ABE)	380,256	373,470
JTPA	804,610	975,503
Other Federal, State or Privately Funded Programs	1,119,621	760,311
Total	$3,184,084	$3,148,889
MATC Tax Levy	1,310,844	1,180,127
Total	$4,494,928	$4,329,016

Special Funded Projects and Activities are added throughout the year so that even though the total for 1984-85 is slightly less than 1983-84, the total at the end of the fiscal year will probably be greater than it was for 1983-84. In 1983-84, there were 115 special projects and activities included in the Restricted Revenue Fund budget, and in 1984-85, as of July 1984, there were about 70 projects included in this budget.

Vocational Education Amendment Activities

Vocational Education Amendment (VEA) federal funds are allocated through the State VTAE Board. Funds are available for activities designated for disadvantaged and handicapped, regular vocational programs including equipment, consumer and homemaking activities in depressed areas, and high technology. Some VEA funds are allocated by MATC to delegate agencies. These projects are listed separately. As of July 1984, VEA funds will be utilized in 1984-85 for the following activities:

Handicapped (VEA - $350,000 MATC - $110,000)
Services for the Visually Impaired
Services for the Hearing Impaired
Basic Vocational Development Project for the Mentally Retarded

MATC Disadvantaged Population Activities
(VEA - $240,000 MATC - $175,000)
Instructional Reinforcement Tutoring for Educationally Disadvantaged Students
Educational Work Study - Adult High School Students
Ethnic Minorities Outreach - Hispanic and Native American
Women's Center - Support Services for Women
Vocational Education Programs for Displaced Homemakers and Other Special Groups

Delegate Agencies Disadvantaged Activities (VEA - $275,000 MATC - 0)

In addition to programs for the disadvantaged conducted at MATC, funds are allocated and support given for activities at Delegate Agencies throughout the Milwaukee community.

Business Lab for the Disadvantaged, OIC
Prevocational Education for Entrance into Vocational Training, Urban League
Preparation for Apprenticeship and Vocational Training, Big-Step, Inc.
Short Order Cook Program, UMOS
Prevocational Education for Limited English Speaking, UMOS
Assessment, Training, and Job Placement, Council for the Spanish Speaking
Prevocational Education, Commando Academy
Consumer and Homemaking Consortium, UMOS
Budget Power, Consumer Education, OIC

Regular Program Activities (VEA $180,000 MATC - $118,000)
Office Equipment Repair - a new Diploma Program for Protected Classes
Computer Science Technology, Expansion of Existing Associate Degree Program, for Protected Classes
VTAE District Liaison for Excess and Surplus Property
High Technology Equipment
Career Tryouts for High School Age Youth

High Technology Activities (VEA - $74,000 MATC - $55,000)
Diagnostic/Medical Imaging Technician
Advanced Level Respiratory Therapy - Pulmonary Function Technology

It is estimated that these programs will provide services to approximately 17,800 individuals including 800 handicapped, 3,000 women, and 14,000 disadvantaged. MATC will continue to provide service for the handicapped and disadvantaged, and to cooperate with Delegate Agencies in these activities. Activities will be planned and developed each year that are within the allocations provided by the State VTAE Board and the limitations of the MATC budget.

Each year the State utilizes a Special Set-Aside for construction ($300,000 in 1984-85) that individual Districts apply for. MATC will receive approximately $74,000 in 1984-85 for its $1.5 million remodeling program. An application for the new building to be built at the Milwaukee Campus, and for annual remodeling, will be made in 1985-86.

Adult Basic Education (ABE)

ABE programs are funded with federal funds that are allocated through the State VTAE Board. An ABE program is operated at the Milwaukee Campus and at outreach centers. In 1984-85, the MATC program was financed with $180,000 of federal funds and approximately $512,000 of MATC tax levy funds.

ABE programs are offered at the Spanish Center and OIC utilizing federal funds distributed by MATC. In 1984-85 the Spanish Center ABE budget is $121,600 and the OIC budget is $46,733.

Job Training and Partnership Act (JTPA)

MATC is participating in various JTPA-funded activities. These may be categorized as follows: 8%, Title III, or Title 2A SDA. Additional projects are added throughout the year. As of July 1984, the following activities are planned.

8% JTPA Projects

These projects are funded through an allocation from the State VTAE Board. In 1984-85, approximately $250,000 is being utilized for MATC-operated projects:

Future Skill Needs Assessment, A Labor Market Demand and Skills Inventory
Customized Training for Business and Industry
Displaced Homemakers Office Update, A Cooperative Program with Interfaith (at West Campus)
Office Skills Program for General Assistance and WEOP clients (at Milwaukee Campus)
Computerized Accounting and Office Systems (at North Campus)

A $295,000 allocation of 8% funds from the State of Wisconsin through MATC is being used for Milwaukee Youth Initiative out-of-school youth education programs. MATC personnel are responsible for monitoring the programs and fiscal records of these projects which are carried out by ten Milwaukee Core Group Delegate Agencies. These Delegate Agencies provide GED, prevocational education, counseling, and placement services to disadvantaged youth in the inner city, north and south. Delegate Agencies participating in these activities are: Center for Spanish Speaking; Social Development Commission; Commandos; Career Youth Development; Milwaukee Christian Center; Multi-Cultural Community; UMOS; OIC; Latin American Union for Civil Rights, and New Concepts.

Title III JTPA Projects

MATC contracts with governmental and private agencies to provide training under Title III, JTPA. For example, in 1984-85, the following will be operated.

Custodial Worker
Machine Maintenance
Digital Electronics
Word Processing
Custodial/Maintenance
Institutional Home Manager
Waiter/Waitress Training

Projects are continually added during the year as need for training develops. Subcontracts of $200,000 or more are expected in 1984-85.

The Milwaukee County SDA has funded a $120,000 Electronics Systems Technician program in cooperation with the GE Medical Systems Corp. at the West Campus.

Title IIa, SDA Funds Activities

Until 1983-84 MATC operated training programs under Title IIa for the Milwaukee County SDA. In 1983-84 and 1984-85, there were no funds allocated to MATC from the Milwaukee County SDA. A number of projects have been operated at the MATC North Campus utilizing funding from the Waukesha, Ozaukee, and Washington Counties (WOW) SDA; examples of these are as follows:

Office Skills
Landscaping Planning and Maintenance
Computerized Accounting

About $200,000 of WOW-SDA funding will be utilized by MATC at the North Campus in 1984-85.

Other Federal, State, or Privately Funded Programs

The Research, Planning, and Development Department assists other MATC departments in preparing proposals for funding by outside sources other than VEA, ABE, or JTPA. Each year grants are received from other outside sources. In 1984-85, as of August 1984, it is anticipated the following activities will be in operation.

FIPSE Flexible Manufacturing Grant. MATC received $100,000 of a $300,000 three-year grant in 1984-85 for development of curriculum and materials for FMS.

Prime Time for Parents. A television series is being produced with outside funds of about $60,000 from public and private sources, and MATC funding of $27,000 in 1984-85. This is a three-year project.

Special English as a Second Language Programs in 1984-85 are funded at MATC for approximately $52,000 and at the Spanish Center for $15,000.

The Wisconsin Department of Vocational Rehabilitation is funding two projects for the handicapped: 1) Special needs advising handicapped students, and 2) services for the Sensory Impaired ($293,000).

An Apprentice Curriculum Development Grant of $25,000 for preparing apprentice curriculum materials.

Trade Recovery Act (TRA) Programs. Five TRA Projects ($120,000) were completed in 1983-84. Some TRA projects are expected to be operated in 1984-85.

Additional proposals will be prepared during the 1984-85 year as needed and when funding possibilities become available. The Research, Planning, and Development Department coordinates all special funded programs and activities. The Business and Industry Relations Department has responsibility for JTPA activities and the General Education Instructional Division has direct responsibility for ABE programs. Individual projects are supervised by personnel from the appropriate instructional division or Student Services. Urban Concerns has responsibility for working with Delegate Agencies.

CHAPTER IX

PHYSICAL FACILITY NEEDS

Background

The Master Plan adopted by the MATC Board and approved by the State Board of Vocational, Technical and Adult Education in 1973 proposed a new South Campus Center, a new North Campus Center, an addition to the present West Campus Center, purchase of a former automobile agency to be remodeled into an industrial instruction area, major remodeling of the Milwaukee Campus, and an addition to the Milwaukee Campus, to be completed by 1976. At the present time, all of the above, except the addition to the Milwaukee Campus, have been completed.

Approximately $16 million in major remodeling has been completed in existing buildings at the Milwaukee Campus since the adoption of the Master Plan in 1973. The renovating and updating of existing buildings at the Milwaukee Campus has been a continuing effort for many years and must be continued in the future. However, only maintenance work is now being done on separate buildings referred to as the M, G, X, and Student Center operated by MATC which are old and outdated facilities located between Seventh and Eighth Streets on State Street. These buildings would require extensive renovation to be usable in the future, and were planned to be used only temporarily at the time of their purchase in the 1960s.

The Milwaukee Campus will continue in the future to offer, with only a few exceptions, all programs offered by MATC, and will have more than 50% of total District enrollment. The Milwaukee Campus is the only campus at which full-time programs in Health Occupations, Graphic and Applied Arts, and Television will be offered.

Plans for construction of a new building at the Milwaukee Campus on State Street between Seventh and Eighth Streets have been prepared several times in the last fifteen years.

1. In the 1960s, a plan for a Student Center and Library building was developed, as well as alternate plans for a Student Center.

2. In 1973, as part of the MATC Master Plan, the construction of a building which included classrooms that would allow for expansion and remodeling of Student Services, Student Center, Resource Center, and other support services in existing facilities that were vacated, was proposed.

3. In 1980, as part of the Economic Development Plan for the City of Milwaukee, a proposal was prepared for construction of a $7 million, 120,000 sq.ft. building (including 25,000 sq.ft. of under-building parking on one level), which would have included Funeral Service facilities; a 32,000 sq.ft. Student Center; some Student Service facilities including IVR; and classrooms to replace M, X, and G Buildings. The MATC Board passed a resolution authorizing the MATC Administration to seek funds for construction of the building and to notify the State VTAE Board of the plans (March 26, 1980). A public hearing on the Environmental Impact Study prepared for the construction was held on December 6, 1979. Proposals requesting funding were prepared but no funding was obtained from outside sources.

The new building at the Milwaukee Campus continues to be included in the Economic Development Plan for the City of Milwaukee, and is also included in the long-range Master Plan approved by the State VTAE Board in 1973.

Major construction and remodeling are planned in the next five years. Physical facility projects can be categorized as follows:

1. New building at Milwaukee Campus to contain all Student Services, Student Affairs and Activities facilities (80,500 sq.ft., estimated $6.8 million).

2. Remodeling of areas in existing facilities at Milwaukee Campus vacated by Student Services, Student Affairs and Activities in Main and "C" Buildings (47,000 sq.ft.; $2.3 million 1985-86, 1986-87, and 1987-88).

3. Remodeling of instructional facilities at all campuses to accommodate new, modified, or expanded programs.

4. Remodeling of non-instructional service and support areas as required at the Milwaukee and Regional Campuses.

5. Major building repair projects, largely at the Milwaukee Campus.

NEW BUILDING

A new building which enhances the image of MATC is to be constructed at the Milwaukee Campus on State Street, between Seventh and Eighth Streets, and will include the following:

1. A main entrance for new students into a comprehensive, consolidated Student Service facility, including Admissions, Counseling, IVR (Institute for Vocational Readiness), Registration and Records, Testing, Financial Aids, Placement, and services for special-need students.

2. Consolidated Student Affairs and Activities facilities including offices, conference rooms, lounge and recreation areas, and multi-purpose room and food services in new construction.

3. Teleconference Room to accommodate teleconferences of various size groups.

Assignable areas for the building are estimated as follows:

	Desired Sq.Ft.
1. Student Services Administration	675
Admissions and Counseling	
Information	770
Admissions	1,400
Counseling	2,800
Registration and Records	
Registration	3,500
Records	4,000
Bursar	150
Multipurpose Area	800

New Building Assignable Areas (Cont.)

	Desired Sq. Ft.	
Career Planning and Placement		
Institute for Vocational Readiness	3,000	
Career Evaluation	1,200	
Testing	4,000	
Placement	1,200	
Agency and Special Services		
Agency and Special Services	3,500	
Financial Aid	1,800	
Student Affairs		
Dean of Student Affairs	470	
Assistant Dean of Student Affairs	375	
Student Publications	800	
Student Senate	650	
Student Affairs and Activities	1,200	
Alumni and Housing	400	
Recreation	4,200	
Student Organizations	400	
Radio Station	300	
Identification and Lost and Found	400	
Sub-Total	37,990	sq.ft.
2. Multi-Service/Multi-Use Areas		
Food Service (Kitchen and Storage)	2,500	
Lounges (2 or 3 or ??)	3,200	
Multi-Purpose Room	10,200	
Conference Rooms (3)	1,400	
Sub-Total	17,300	sq.ft.
3. Teleconference Room	4,000	
Total Net Assignable Area	59,290	sq.ft.
Non-Assigned	21,210	sq.ft.
Total	80,500	gross sq.ft.*

*The total increase as a result of new construction at the Milwaukee Campus is 30,886 gross square feet. This is determined as follows:

Gross Square Feet in Construction	80,500	sq.ft.
Existing M, X, G, and Student Center Renovated	-31,014	sq.ft.
IVR and U Building Rental	-18,600	sq.ft.
Milwaukee Campus Gross Addition	30,886	sq.ft.

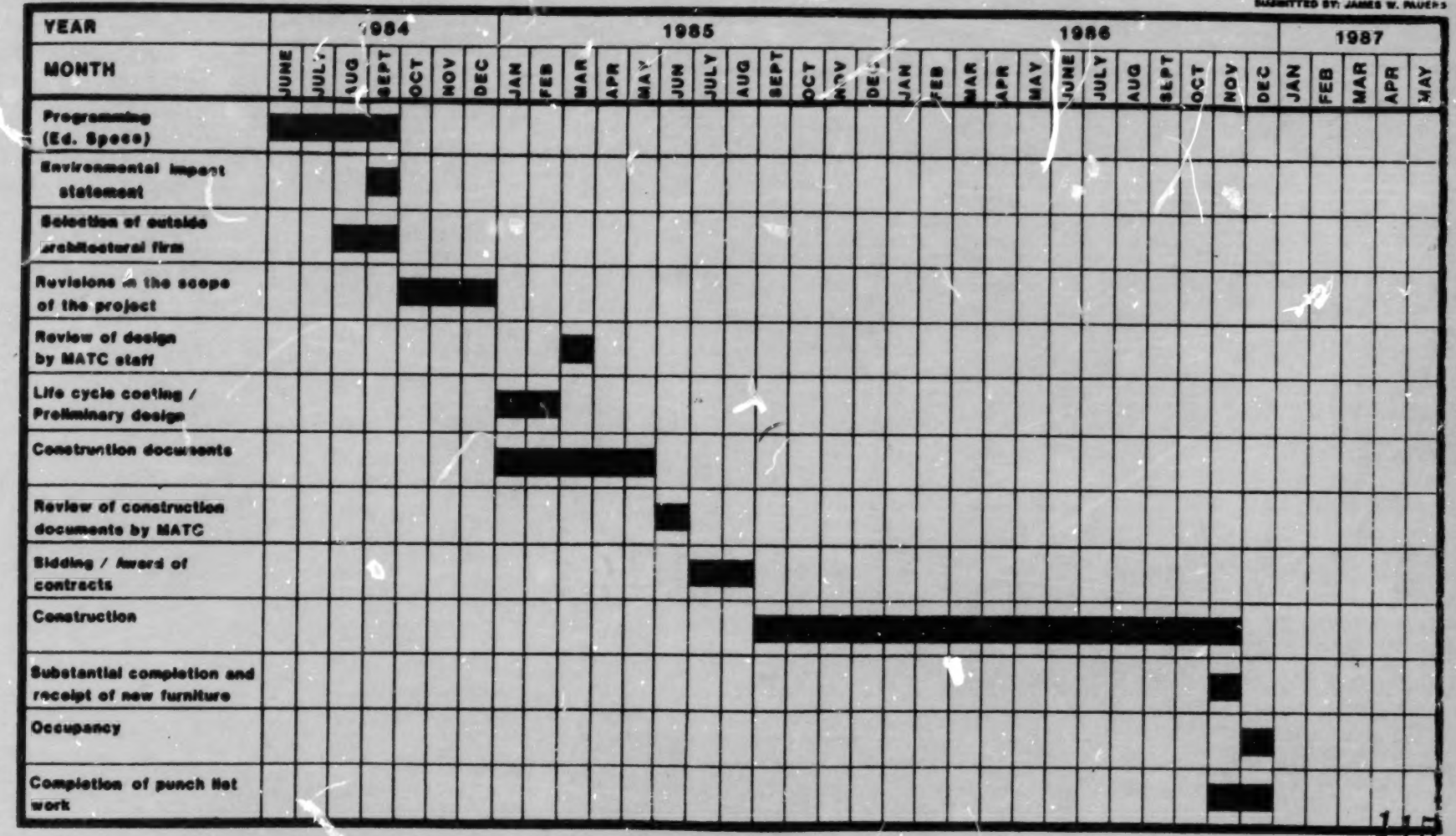
As shown in the New Building Project Schedule on the next page, the new building construction will start in August 1985 and be completed in the fall of 1986.

NEW BUILDING - MILWAUKEE CAMPUS

PROPOSED PROJECT SCHEDULE

REVISED: 12-10-84

SUBMITTED BY: JAMES W. PAUERS


YEAR
1984
1985
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Programming (Ed. Specs)
Environmental impact statement
Selection of outside architectural firm
Revisions in the scope of the project
Review of design by MATC staff
Life cycle costing / Preliminary design
Construction documents
Review of construction documents by MATC
Bidding / Award of contracts
Construction
Substantial completion and receipt of new furniture
Occupancy
Completion of punch list work

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REMODELING OF EXISTING FACILITIES VACATED BY STUDENT SERVICES AND STUDENT AFFAIRS

About 47,000 square feet of area will be vacated when Student Services and Student Affairs functions are moved to the new building. The Math Center (X Building) and ABE Classrooms (G Building) will be tentatively relocated in the C Building Library and C Building Cafeteria and adjacent areas. Remodeling of vacated areas is scheduled in three phases as follows (also see attached drawings):

Phase 1 ($657,000) - 1986-87

1. Remodel C Building Library, about 2,000 gross sq.ft., C332, and C353 for a Math Center to replace facilities presently in X Building of about 1,900 sq.ft. Other classrooms on third floor would be utilized as math classrooms in future.
2. Renovate 702 for Graphic and Applied Arts programs to replace C332.
3. Remodel C Building Cafeteria, 5,861 gross sq.ft., for ABE and MATC Basic Education programs. This facility will replace present G Building facilities of about 4,000 net sq.ft. Some adjacent classrooms may also be required.

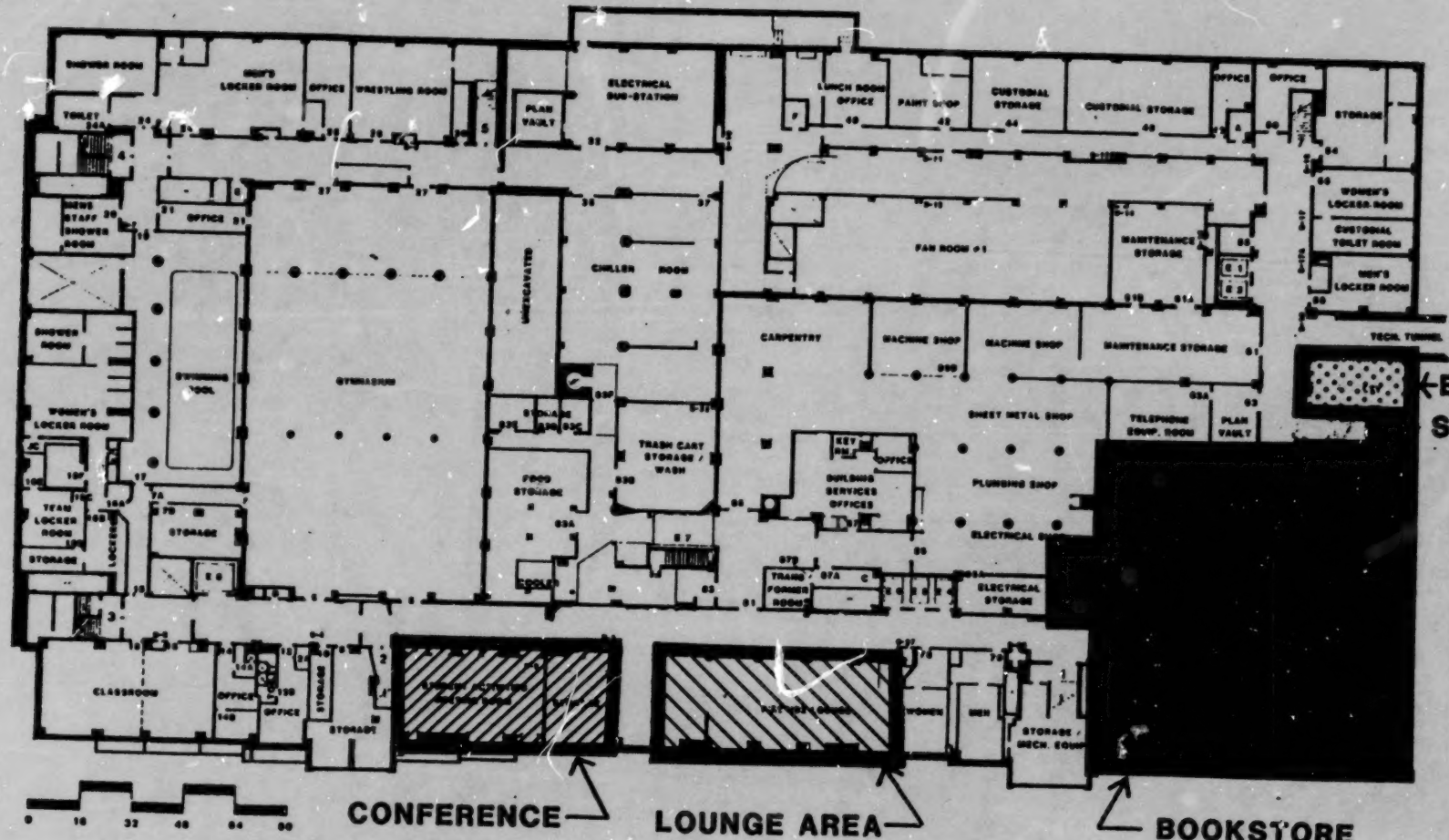
Phase 2 ($1,444,300) - 1987-88

1. Construct Bookstore in basement of Main Building (start after completion of new building), September 1986, to be completed second semester 1986-87. Expansion from 3,200 sq.ft. to 8,228 sq.ft.
2. Expansion of Library and replacement of C Building Library on second floor, 241, 273. Library would be increased about 3,000 sq.ft. over present total of Main Building and C Building facilities.
3. Expansion of Business Office on second floor, Main Building, about 1,500 sq.ft.
4. Remodel rooms 212, 214, 216, 218, 220, and 222 for administrative offices, Main Building, of about 3,000 sq.ft.
5. Remodel C279 and adjacent rooms (present Student Service areas) 9,375 sq.ft. for instructional resource centers (Educational and Developmental classrooms). Some classrooms and office areas would replace leased facilities in U Building.

Phase 3 ($283,000) - 1988-89

1. Remodel first floor rooms 100, 102 (present Bookstore), 176 for instructional classrooms, instructional work areas, and 102, 104 for Purchasing Department.

An Annual allocation of $1,000,000 is planned for each of these three years for remodeling. In addition to the $1,000,000 each year, prior year's project balances from the Capital Projects Fund and interest income could be utilized for remodeling. Equipment costs for remodeling projects will be funded from Equipment Budget rather than Capital Projects Fund whenever possible. In addition to the remodeling of vacated areas, major remodeling and maintenance projects would also have to be funded by the $1,000,000 per-year budget allocation.



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NORTH

BASEMENT PLAN

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MILWAUKEE CAMPUS
MAIN BUILDING

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(EFFECTIVE SUMMER 1984)

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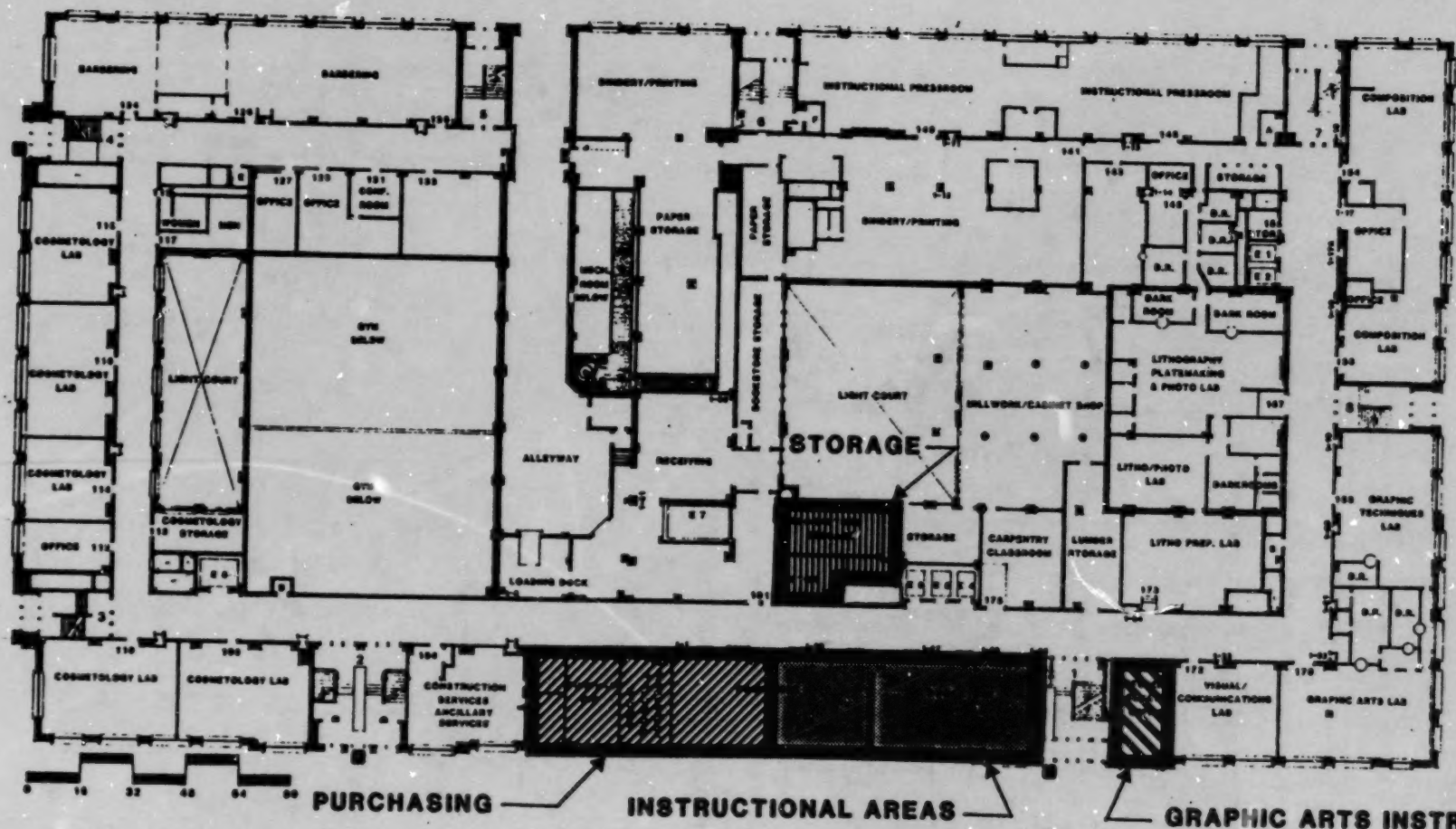

NORTH

FIRST FLOOR PLAN

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MILWAUKEE CAMPUS
MAIN BUILDING

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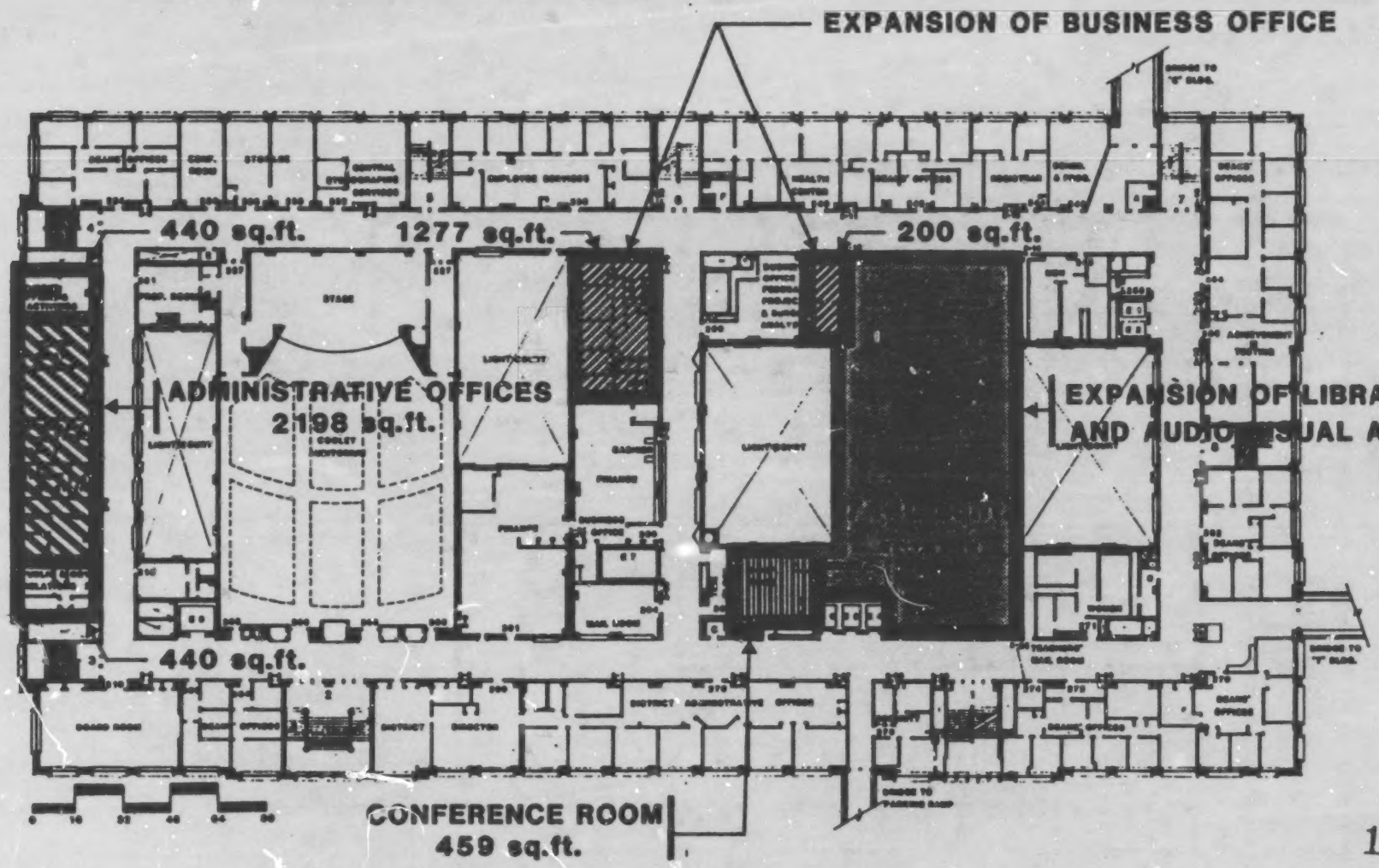

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NORTH

SECOND FLOOR PLAN

MILWAUKEE CAMPUS
MAIN BUILDING

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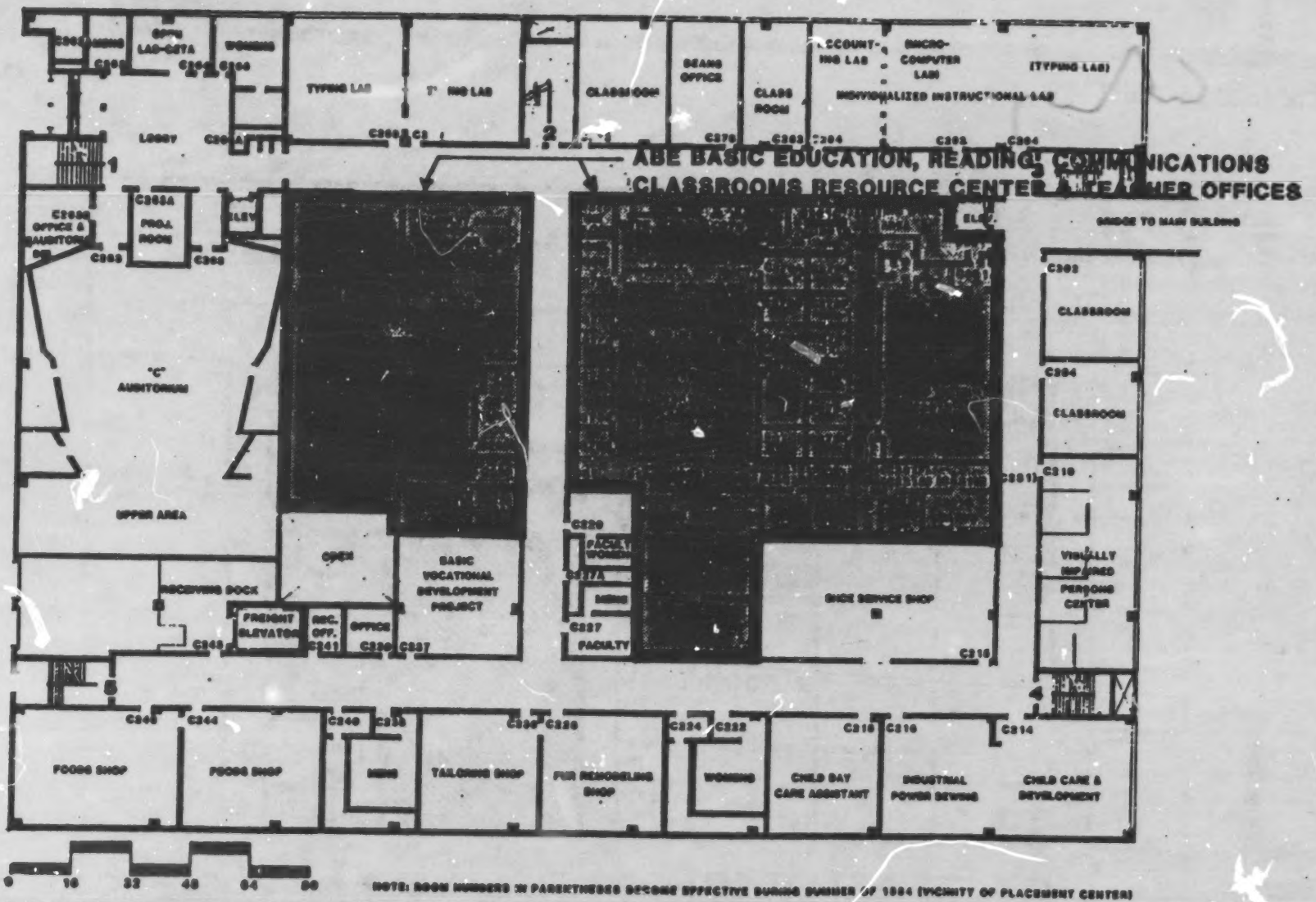

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SECOND FLOOR PLAN

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MILWAUKEE CAMPUS
CONTINUATION BUILDING

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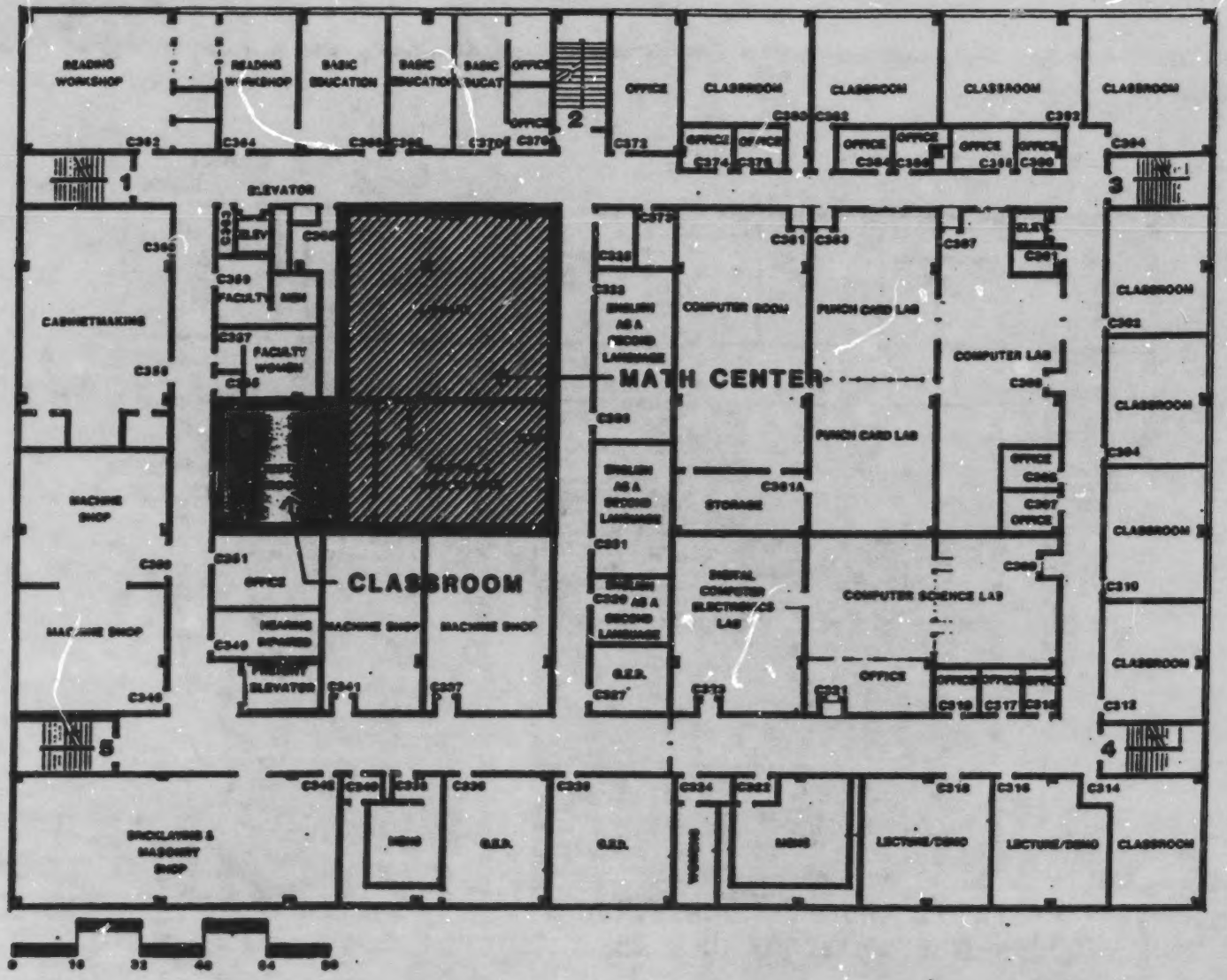

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NORTH

THIRD FLOOR PLAN

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MILWAUKEE CAMPUS
CONTINUATION BUILDING

MAJOR PHYSICAL FACILITIES REQUESTS

and

TENTATIVE SCHEDULE

Other than the new Student Services and Activities Building to be built at the Milwaukee Campus, no new buildings are proposed for construction in the District in the next five years. Facilities for new and modified instructional programs will be provided through remodeling and renovation of existing facilities. Over $16 million in remodeling has taken place at the Milwaukee Campus since 1973, and it will be necessary to continue upgrading older facilities at the Milwaukee Campus in addition to providing adequate facilities for new or expanding programs. Remodeling at Regional Campuses will be limited to changes required for adding new or expanded programs or services.

Requests for major remodeling have been made by administrators at the four MATC Campuses and are listed by Campus below. The requests listed below do not include minor remodeling projects, which are funded from the Operating Budget Building Repair account. These requests will be reviewed by the MATC Administration with recommendations then going to the MATC Board for approval of remodeling requests.

The projects listed below would all have to be funded from the annual $1,000,000 budget or Capital Projects prior year balances. The instructional projects listed below are coordinated with Remodeling Projects for vacated areas, and major building repair projects. The construction costs, not including equipment, for the 1985-86 projects listed below are $1,015,000.

1985-86

Milwaukee Campus

1. Remodel Respiratory Therapy Lab, Room 402 (Health Occupations).

   Remodel a part of lab to provide a clinical simulation area. Current lab is inadequate for simulated pre-clinical training. The traffic pattern with equipment setups makes it difficult for students to move between learning stations. Respratory Therapy trends point toward increased training in critical care and non-invasive cardiopulmonary monitoring.

2. Remodel Room 300 into a lecture room (Business).

   Room 300 is one of only two rooms on the 3rd floor of the Main Building that has not been renovated since 1973. The room will be converted from a business lab to a lecture classroom.

3. Remove Machine Shop equipment from 3rd floor, F Building. Move Hydraulics equipment from T-145 to 3rd floor, F Building. Convert T-145 into mini-FMS Center.

Milwaukee Campus (Cont.)

The CETA Machine Shop program formerly located on the 3rd floor of the F Building has been discontinued and the machines located in the F Building must be removed. Machines that are usable will be relocated to other Machine Shop facilities in the District. To provide space for expansion of Flexible Manufacturing program facilities, hydraulic equipment from Room T-145 will be moved to the former Machine Shop in the F Building. The F Building is an appropriate location for the Hydraulics Lab. These relocations will allow long-range expansion of Numerical Control equipment and other Flexible Manufacturing-related facilities.

4. Remodel Room 558 for Graphic Arts use.

Room 558 is the present Funeral Service facility at the Milwaukee Campus. The Funeral Service program is being transferred to the West Campus and the room is no longer needed. Room 558 will be renovated to accommodate a portion of the Graphic and Applied Arts program located in Room C-332, which will be vacated by Graphic and Applied Arts to accommodate the temporary location of Student Services functions during the construction of the new Milwaukee Campus building. After completion of the new building, Room C-332 will be part of the Math Center Complex to replace the X Building facility.

5. Completion of T Building Heating/Ventilating.

The 1984-85 remodeling allocation provided $241,000 to renovate the heating/ventilating system of the third and fourth floors of the Technical Building to include cooling necessary to accommodate the needs of instructional programs. Subsequently, it was ascertained that the existing 450-ton and 900-ton chiller units would have sufficient capacity to cool the area, but that rerouting of chilled water piping, valving, and controls would be necessary to (1) selectively cool either the Main Building or the Technical Building or both; (2) greatly improve efficiency by loading each chiller, or both, in response to cooling demands; and (3) prepare for the anticipated cooling load of the new building. This project will allow completion of the work begun in 1984-85.

6. Roof Replacement C Building, Phase One.

The 20+-year-old C Building roof is developing leaks and should be replaced. The most serious problems with the roof are on the West end over the television facilities, and this portion of the roof will be replaced under Phase One of the Roof Replacement for the entire C Building.

7. Renovate F Building Exterior.

The exterior front of the F Building has been deteriorating for many years and is a safety hazard as well as causing leakage problems which affect the roof and walls of the building. The exterior front needs to be renovated in order to prevent the deterioration of the recently replaced roof, and the walls of the building.

North Campus

1. New 24-station Terminal Lab integrated with present Microcomputer Lab.

   A twenty-four (24) work station Terminal Lab is to be installed to serve the second year of the Business Data Processing program which has been expanded at the North Campus. The terminals will have communication capabilities to the Instructional Mainframe on the Milwaukee Campus.

2. Develop Electronics Lab, Room 270, for Associate Degree Program and Room 275 for Biomedical Electronics.

   The initial step in upgrading the T & I programming at the North Campus will be to move the existing Biomedical Technology Associate Degree program from the Milwaukee Campus to the North Campus. This is to be partially completed during the summer of 1985, with both years of the program in operation at North in August of 1985. Both laboratories are needed for the Biomedical program. In addition, the laboratories will serve other developing Electronics Technology programs and currently submitted proposals to TRA and JTPA for contract training.

South Campus

1. Remodel the present Media Center and small adjacent rooms to accommodate an Individualized Instructional Lab and reduced-size Media Center.

   This project converts much unused space in the South Campus Media Center (A204) into a Business Learning Center and incorporates it into a Microcomputer Lab. It also provides access to classroom A204N, heretofore accessible through the Library or Media Center only.

   This project provides an identifiable Microcomputer Lab for all divisions separate from but adjacent to the Business Learning Center. It will also enable the Business Division to return Room A214 to its originally designated use, a typing lab. This project, along with the elimination of the Business Machines program, will allow the conversion of Room A212 into a general classroom.

West Campus

1. Relocate Student Activities, Room 114, to Upholstery Room 117, and utilize Room 114 as a general classroom.

   Room 117 (2,240 sq.ft.) is larger than the present Student Activities facility, Room 114 (940 sq.ft.), and is in an appropriate location adjacent to the Cafeteria and other Student Activity facilities. Additional space for students at the West Campus has been a priority need for several years. This area includes a first aid room.

1985-86 (Cont.)

West Campus (Cont.)

2. Information Processing Lab, Room 241.

   Renovate Room 231, Business Learning Center, and Typing Labs, Rooms 235 and 241, to accommodate Information Processing Center. Storage area for microcomputer hardware and software and service counter will be relocated to serve the entire area, Rooms 231, 235, and 241. This will provide the West Campus with a comprehensive Information Processing Center to serve Secretarial Science programs.

3. Relocate Upholstery Shop, Room 117, to Machine Shop, Room 129.

   Room 129 is 410 sq.ft. larger and in a more appropriate location than the present Upholstery Shop. The Machine Shop program has been transferred to the South Campus from the West Campus, and as a result the room is no longer needed as a Machine Shop. A new Machine Repair program at the West Campus will be located in the A Building.

4. Construct Machine Repair Lab.

   Remodel areas in Annex Building to accommodate new Machinery Repair program.

5. Renovate Room 113.

   Renovate Room 113 (present Evening School office) into a General Purpose Utility Room (mail, copier, etc.) and office for Student Activities Director. Room 113 is adjacent to Student Activities Room 117 and will permit Director of Student Activities to monitor the area.

1986-87

Milwaukee Campus

1. Remodel C Building Library, about 2,000 gross sq.ft., C332, and C353 for a Math Center to replace facilities presently in X Building of about 1,900 sq.ft. Other classrooms on third floor would be utilized as math classrooms in future.

2. Renovate 702 for Graphic and Applied Arts programs to replace C332.

3. Remodel C Building Cafeteria, 5,861 gross sq.ft., for ABE and MATC Basic Education programs. This facility will replace present G Building facilities of about 4,000 net sq.ft. Some adjacent classrooms may also be required.

4. Remodel Information Processing Lab, Room 310 (Business).

5. Remodel Laser Lab, T Building (Technical and Industrial).

6. Additional Food Service Lab (Home Economics).

1986-87 (Cont.)

Milwaukee Campus (Cont.)

7. Remodel Medical Assistant Lab, Room 434 (Health Occupations).

8. Enlarge Computing Lab, Mainframe and Microcomputer Room C303.

9. Remodel C214-216 for Industrial Sewing. Relocate Child Care and Development (Home Economics).

10. Renovate Toilet Rooms, 5th Floor, Main Building.

11. HVAC Improvements, TV 10/36 - Back-up Cooling, Humidity Control.

12. Window Removal, Light Courts, Main Building.

13. Re-caulk T Building Windows.

North Campus

1. Permanent Walls for the Open Classrooms, area 203, 205, 251 and 253.

West Campus

1. Integrate Basic Skills into an expanded Reading Center, Room 210, and develop Basic Education Workshop.

2. Remodel Room 343 (present Ceramics Lab) for general classroom use.

3. Move Word Processing Equipment and develop Room 212 as a Business Lab.

1987-88

Milwaukee Campus

1. Construct Bookstore in basement of Main Building (start after completion of new building), September 1986, to be completed second semester 1986-87. Expansion from 3,200 sq.ft. to 8,228 sq.ft.

2. Expansion of Library and replacement of C Building Library on second floor, 241, 273. Library would be increased about 3,000 sq.ft. over present total of Main Building and C Building facilities.

3. Expansion of Business Office on second floor, Main Building, about 1,500 sq.ft.

4. Remodel rooms 212, 214, 216, 218, 220, and 222 for administrative offices, Main Building, of about 3,000 sq.ft.

5. Remodel C279 and adjacent rooms (present Student Service areas) 9,375 sq.ft. for instructional resource centers (Educational and Developmental classrooms). Some classrooms and office areas would replace leased facilities in U Building.

1988-89

Milwaukee Campus

1. Remodel first floor rooms 100, 102 (present Bookstore), 176 for instructional classrooms, instructional work areas, and 102, 104 for Purchasing Department.

2. Develop Marketing Lab on 3rd Floor of Main Building (Business).

3. Move Vicom Center from 3rd Floor to vacated Bookstore area on 1st Floor (Graphic & Applied Arts).

4. Develop Central Electronics Repair and Distribution Center (Technical and Industrial).

5. Remodel Dental Lab Technician Lab, Room 436 (Health Occupations).

6. Remodel Dental Assistant Lab, Rooms 486-488 (Health Occupations).

7. Expanded area for Hearing Impaired Program personnel to provide services to students (Adult General Education).

8. Renovate Toilet Rooms, 6th Floor, Main Building.

9. Roof Replacement, C Building, Phase 2.

10. Brick Cleaning, refurbishing exterior, caulking, Main Building.

11. HVAC, Air Conditioning, C Building.

North Campus

None

South Campus

None

West Campus

1. Partition vacated Graphic Arts Rooms 118 and 120 for general classroom use.

1989-90

Milwaukee Campus

1. Additional Classrooms, including two that can accommodate more than 40 students (Business).

2. Additional Lecture Room (Home Economics).

3. Develop new Learning Resources Center for Health Occupations.

1989-90 (Cont.)

Milwaukee Campus (Cont.)

4. Remodel Physical Education locker room and shower areas (General Education-Postsecondary).

5. Remodel Foreign Language Lab, Room 392.

6. Insulate C Building Walls/Slabs around parking areas.

7. Asphalt replacements in Parking Lots.

8. Roof Replacement, A Building.

North Campus

None

South Campus

None

West Campus

1. Refurbish/Cover Brick Exterior, Alley Side.

1990-91

Milwaukee Campus

1. Remodel Bakery (Home Economics).

2. Remodel Dental Hygiene Lab, Rooms 462/464, 470, 472 (Health Occupations).

3. Re-roof T Building, Phase 2, Auditorium and Shops

4. Asphalt Parking Lot Repairs, All Campuses.

5. New Terrazzo, Milwaukee Campus Halls.

North Campus

1. Business Operations Training Center (BOTC) facilities to be provided in renovated areas adjacent to Library.

2. Recreational areas and athletic fields as well as physical facility and shower room facilities.

South Campus

1. Develop recreational and athletic fields on-site.

West Campus

1. Large Lecture Room.

2. Re-cap Urethane Roof, "A" Building.

BUILDING REPAIR - OPERATING BUDGET ITEMS

Repair of buildings is required on a regularly scheduled basis to properly maintain the 2,000,000 square feet of the District's physical plant. Building repairs are funded from two separate accounts, depending upon the extent of the repair:

Capital Project Fund

Included in this account are major costly items, such as "C" Building roof replacement, renovation of the "F" Building exterior, replacement of asphalt parking surfaces, and window removal and replacement with energy efficient units in the Main Building of the Milwaukee Campus. Each such major repair item is treated as a separate project line item listed under "Major Physical Facilities Requests".

Operating Budget Building Repairs

Building repairs in this category include yearly scheduled refurbishing of painted surfaces, carpeting, draperies, etc., and minor repair/replacement of structural, electrical and mechanical components. Nationally accepted standard formulas based on the age, area and replacement value of buildings indicate a minimum annual expenditure of $700,000 is needed for minor building repairs to properly maintain MATC facilities. Following is a list of minor repair project categories to be implemented on an annual basis. (Amounts shown may vary somewhat within categories as needs change from year to year.)

Painting: Yearly maintenance and refurbishing of interior and exterior painted surfaces on 15-to 20-year cycle.	$100,000
Floor Coverings: Yearly replacement of carpeting and vinyl floor covering in small areas on an "as needed" basis.	20,000
Window Coverings: Yearly replacement of shades, drapes, and blinds as the materials exceed their useful life.	10,000
Heating, Ventilation, Air Conditioning: Specific projects related to energy conservation, comfort and code compliance. Examples would be improvements in exhaust systems, HVAC control improvements, improved air filtration, etc.	150,000
Plumbing, Sewer: Specific projects to correct problems or make minor improvements in plumbing and sewer systems. Examples would be replacement of roof conductors, lawn sprinkler repairs, sewer break repairs, chemistry lab drain replacements, sewage pump replacements, etc.	20,000

Electrical Lighting: Specific projects to correct problems, improve lighting and improve operational efficiency. Examples are replacement of obsolete light fixtures with modern energy-efficient fixtures; rewiring circuits to eliminate overloads or code problems; group relamping; automatic controls, such as

photo eye, motion detectors, timers, etc.

Routine maintenance of major electrical equipment -- transformers, switchgear, etc.	$160,000
Structural - Architectural: Specific repairs or modifications to correct damaged building components, improve appearance, and eliminate hazards and code violations. Examples include roof patching, tuckpointing, caulking, shop door replacements, signage, door and entrance repairs, etc.	90,000
Grounds, Parking: Specific projects related to repairs and appearance, and safety hazards such as re-striping parking lots, minor asphalt/concrete repairs, rails, steps, walks, planter repairs, minor landscaping, etc.	50,000
Minor Renovations: Implementation of minor building remodeling not considered "Capital." Projects cost less than $5,000 each. Typical examples are ceramic tile around cooking surfaces, counter cabinet changes, locker/storage modifications, office partitions, etc. These projects are requested by individual departments.	30,000
Security, Safety Code Corrections: Specific projects related to major repairs and minor improvements of building safety equipment. Examples are additions to smoke/fire detection systems, major maintenance of computerized safety systems, renovation of fire extinguisher systems, etc.	20,000
Emergency Repairs: Funds for unanticipated emergency building repairs such as major HVAC equipment failure, electrical failures, sewer breaks, etc.	50,000
BUILDING REPAIR TOTAL:	$700,000

CHAPTER X

FIVE-YEAR EQUIPMENT PLAN

In August 1984, all Instructional Divisions were requested to prepare five year plans for major equipment purchases of $100 or more. Equipment lists were prepared by instructional departments through the coordinated efforts of faculty and administrators. Deans, associate deans, and instructional chairpersons revised the equipment requests prior to review by occupational program advisory committees. All occupational advisory committees have met to make recommendations regarding equipment needs for the next five years.

After reviews by the occupational advisory committees, the Executive Dean met with each dean to review the equipment lists. The lists were then evaluated and discussed by members of the Director's Executive Committee. The results of the entire review process are lists of equipment by Division, Department, location, and year that relate to the Five-Year Master Plan. These lists also provide for the MATC Board the necessary information regarding the quantity of equipment and the funds required to update MATC equipment to current levels of technology.

Equipment plans for Public TV operations, Administrative Services, and other support areas were reviewed by the District Director and other Executive Committee members and are included in the Five-Year Equipment plan.

Equipment purchases are spread over a five-year period to be integrated with program development, inservice equipment training, and needed implementation time. All microcomputer purchases are coordinated through the Instructional Services Department which has developed a five-year implementation plan for locating microcomputers within shops and labs or in separate microcomputer facilities. Audio visual equipment is consolidated in one budget and coordinated through the Instructional Services Department.

Moveable equipment for remodeling projects is included on Division equipment lists. For example, moveable equipment for the remodeling of vacated areas such as the "C" Building library as part of a Math Center, and the "C" Building cafeteria for Remedial and Basic Education facilities is included in the second and third year of the equipment plan.

It is recommended that the MATC Board approve the acquisition of promissory notes to fund the purchase of equipment over the next three-year period and to fund additional equipment purchases in the fourth and fifth years with promissory notes. A detailed list of equipment for each of the five years of the plan has been prepared and is available for review and will be reviewed at least annually by the Board prior to the purchase of equipment.

The tables that follow summarize by Division, Department, location, and year the funding amounts required for the equipment plan. The total cost of the five-year equipment plan is $28,452,608.

5-YEAR EQUIPMENT BUDGET

DIVISION	DEPT.	CAMPUS	1986	1987	1988	1989	1990
ADMINISTRATION	BUSINESS OFFICE	MILW	11,000	12,500	12,500	14,000	2,500
	DISTRICT DIRECTOR	MILW		15,000			15,000
	PERSON/HUMAN RESOURC.	MILW	15,900	1,750			
		TOTAL:	26,900	29,250	12,500	14,000	17,500
AGRIBUSINESS	ENVIRON. HEALTH	NORTH	3,600	11,600	20,100	8,000	
	HORT. AIDE	NORTH	1,350	890			7,000
	LANDSCAPE MGMT.	NORTH	19,500	4,050	1,800		
	ORNAMENTAL HORT.	NORTH	21,500	35,500	43,700	1,000	
	URBAN FORESTRY	NORTH	8,100		6,000		
	WATER/WASTEWATER	NORTH	35,500	26,600	3,000		
		TOTAL:	89,550	78,640	74,600	9,000	7,000
AUXILIARY SRVS.	BOOKSTORE	WEST	10,000	4,250	1,000		
		MILW	19,000	474,000	900		
		NORTH	10,000	800			
		SOUTH	10,000	1,000		200	
	FOOD SERVICE	MILW	11,100	12,900	14,900	7,000	12,900
		TOTAL:	60,100	492,950	16,800	7,200	12,900
BUSINESS	FUNERAL SRVS.	WEST	176,657	18,000			
	MARKETING	MILW		19,165			
	SECSCI	MILW	72,546	22,500	63,900	49,500	27,000
		NORTH	14,400	65,800	24,000	3,000	
		SOUTH	43,260	71,160		39,600	
		WEST	13,800	30,200	4,800	8,000	
		TOTAL:	320,663	226,825	92,700	100,100	27,000
GEN ED	ADULT BASIC ED	MILW	900	32,850			
	BASIC EDUCA.	MILW	1,865				
	CHEMICAL TECH.	MILW	21,600	11,000	11,350	17,000	17,000
	ENG.AS 2ND LANG.	MILW	900				
	ENGLISH	MILW	14,975	5,000	7,000	3,000	10,000
		SOUTH	720				
	ENGLISH/READ.	NORTH	600				
	MATHEMATICS	MILW	1,200				

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5-YEAR EQUIPMENT BUDGET

DIVISION	DEPT.	CAMPUS	1986	1987	1988	1989	1990
	MUSIC	MILW	6,500	500	1,000		
	NATSCI	SOUTH	3,000				
		NORTH	500		2,000	2,000	2,000
		MILW	64,000	38,540	10,200	101,850	
	PHY ED	SOUTH	1,350		950	1,100	500
		NORTH	2,200	3,000	1,500	2,000	
		WEST	1,350		950	500	
		MILW	32,155	8,475	4,200	2,150	1,500
	POLICE SCIENCE	SOUTH	46,980	24,000	35,000	15,000	35,000
	READING	SOUTH	3,440				
		MILW	4,385	1,200	600		
	SOCIAL SCIENCE	SOUTH	450				
		WEST	1,200				
		TOTAL:	210,270	124,565	74,750	144,600	66,000
GEN.INSTITUTION	ADMIN.COMPUTING	MILW	405,000	420,000	430,000	400,000	1,345,000
	COMMUNITY REL.	MILW	13,350	15,000	12,000	15,000	6,000
	MAILROOM	MILW	11,900		12,000		
	WORDPROCESS. CNTR.	MILW	110,500				
		TOTAL:	540,750	435,000	454,000	415,000	1,351,000
GRAPHIC ARTS	COMMERCIAL ART	MILW		10,000			
	CRAFTS	SOUTH	1,300	400			
		NORTH	500	200			
	JEWELRY SRV/SALES	MILW	4,800	8,300	2,800		
	PHOTOGRAPHY	MILW	26,000	13,100	11,000		
	PRINT/PUBLISHING	WEST	40,000				
		MILW	930,000	104,000	200,000		
	VISUAL COMMUN.	MILW	81,499	10,850	83,000		
		TOTAL:	1,084,099	146,850	296,800	0	0
HEALTH OCCUP.	ANATOMY/PHYSIO.	MILW	2,325	6,300	2,750		1,710
	ASSOC.DEG. NURS.	MILW	87,494	31,300	21,350	36,750	17,700
	DENTAL ASST.	MILW	3,775	19,200	11,800	6,600	3,100
	DENTAL HYGIENE	MILW	43,822	18,600	23,800	6,900	
	DENTAL LAB TECH.	MILW	2,062	10,702	4,100	2,400	10,450
	HEALTH UNIT CLERK	MILW	7,750				

5-YEAR EQUIPMENT BUDGET

DIVISION	DEPT.	CAMPUS	1986	1987	1988	1989	1990
	MEDICAL ASST.	MILW	3,500	12,100	6,100	11,400	2,900
	MEDICAL LAB TECH.	MILW	2,450	1,600	3,500	2,000	
	MICROBIOLOGY	MILW	3,680	13,800	6,000	1,000	15,000
	NATSCI 101-102	MILW	12,022	11,469	16,284	13,445	23,919
	NATSCI 156	MILW	1,460	1,800	2,300	1,400	1,750
	OCCUP. THERAPY ASST.	MILW		1,450			
	OPERAT.RM. ASST.	MILW	5,500	3,500	9,350	1,800	6,500
	PHARMACY TECH.AIDE	MILW		6,500	7,000		5,000
	PHYS.THERAPY ASST.	MILW	16,185	11,300	8,500	15,000	15,000
	PRACT.NURSING	MILW	13,809	2,213	3,842	2,866	3,098
	RADIOLOGIC TECH.	MILW	12,160	1,000	99,800	4,000	6,000
	RESPIRATORY THRPY.	MILW	4,475	10,475			
		TOTAL:	222,469	163,309	226,476	105,561	112,127
HOME ECON.	ALTER/TAILORING	WEST	15,295	6,750			
		MILW	20,800	11,400	7,200		
	BAKING	MILW	1,200	39,500	15,000	13,500	
	CHILD CARE	MILW	1,450	800	1,250		
	CLOTH 1,3,4,7	MILW	2,235				
	CLOTHING	SOUTH	5,900	5,130			
		NORTH	2,000	2,000	2,000	2,000	2,000
		MILW	2,085				
	DIETETIC TECH.	MILW	5,700	1,800	400	1,200	
	FOOD PREP.ASST.	SOUTH	11,800	4,150	11,950	350	
	FOODS	SOUTH	2,600	2,650	1,100		
	FOODS & NUTRI.	WEST	6,775	2,750			
	HOME FURN. ASST.	WEST	19,100				
	HOUSEKEEPING MGMT.	WEST	10,095				
	INDUST. SEWING	MILW	46,825	8,700	2,300		
	INTERIOR DESGN	NORTH	12,950	12,413			
		TOTAL:	166,810	98,043	41,200	17,050	2,000
HS RELATIONS	AUTOMOTIVE	MILW		56,831			
	CABINETMKG.	MILW		14,103			
	COMM.SRV.CAREERS	MILW		10,650			
	FOOD SERVICES	MILW		23,390			
	MACHINE SHOP	MILW		3,625	38,400		
	SERVICE STATION	MILW		30,850			

5-YEAR EQUIPMENT BUDGET

DIVISION	DEPT.	CAMPUS	1986	1987	1988	1989	1990
	SMALL ENGINES	MILW		36,565			
	WELDING	MILW		4,851			
		TOTAL:	0	180,865	38,400	0	0
INSTRUC. SRVS.	ACADEMIC COMPUT.	MILW	697,655	516,900	427,400	739,400	306,400
		NORTH	104,112	102,700	31,000	24,000	
		SOUTH	57,500	63,000			46,000
		WEST	64,704	122,404	55,704	24,000	
	AUDIO VISUAL	DIST.	78,000	78,000	78,000	78,000	78,000
	LIBRARY	MILW	2,700	175,850	2,700	850	2,700
		NORTH	16,350	2,500	650	2,500	
		WEST	1,100	300	650	2,200	
		TOTAL:	1,022,121	1,061,654	596,104	870,950	433,100
PHYSICAL PLANT	CONSTRUC. SRVS.	MILW	2,500				
	COORD/SPEC.PROJ.	MILW	9,300	3,100	5,900		
	ENGINEERING SRVS.	MILW	43,600	31,200	23,400	26,400	24,600
	PHYSICAL FACIL.-ADMIN.	MILW	1,328,000	1,082,650	297,600	100,000	364,200
	PURCHAS/RECEIV.	MILW		17,950	4,000		3,500
	SECURITY/COMMUN.	MILW	8,500	142,500	678,000	30,000	
		TOTAL:	1,391,900	1,277,400	1,008,900	156,400	392,300
PUBLIC TV	ADMINISTRATION	MILW	200	6,150	13,500	800	
	BROADCASTING	MILW	222,599	199,305	226,550	68,000	158,200
	TV MARKETING	MILW	7,600	7,600	7,800	7,600	
	TV PROGRAMMING	MILW	19,700	83,000	27,000	27,900	25,300
		TOTAL:	250,099	296,055	274,850	104,300	183,500
SERVICE OCCUP.	BARBER	MILW	2,800			39,000	
	COSMETOLOGY	MILW		100,620	25,800		
	FOOD SERVICE	MILW	54,560	29,217	30,661	1,600	
	MEATCUTTING	SOUTH	2,900	950			

5-YEAR EQUIPMENT BUDGET

DIVISION	DEPT.	CAMPUS	1986	1987	1988	1989	1990
		TOTAL:	60,260	130,787	56,461	40,600	0
STUDENT SRVS.	ADMISS/COUNSEL.	MILW	24,000	60,000			
	HEALTH CNTR.	MILW	1,655				
	IVR	MILW		13,700			
	REGIST/RECORDS	SOUTH	12,625				
		NORTH	2,900				
		MILW	24,000	100,000			
	TESTING	MILW	34,925				
		TOTAL:	100,105	173,700	0	0	0
T&I	AIR CONDITION.	SOUTH	19,120	47,780	950		
	APPLIANCE SERV.	MILW	2,070				
	ARCH.TECH.	MILW		114,400	22,800	22,800	20,000
	AUTO SERV.	MILW	58,165	71,700	4,700		
		SOUTH	49,330	101,660	20,300		
	AUTOBODY	SOUTH	2,800	2,550	1,050	1,200	
	AVIATION MECH.	SOUTH			206,900		
	BIOMEDICAL	NORTH	2,000	18,000	28,000	6,000	
	BROADCASTING	MILW	33,750	44,400	20,000		
	CABINETMKG.	MILW	11,865				15,000
		SOUTH	17,200				
	CARPENTRY	MILW	450	1,160	3,010	1,300	1,000
		SOUTH	9,438				
	CIVIL TECH.	MILW			28,500		
	COMBUST.ENGINE	SOUTH	119,340	56,500	53,550	46,000	55,250
	COMBUSTION ENG.	NORTH	48,970	28,220	25,220	27,820	20,000
	COMMUNICATIONS	MILW	7,240	6,760	11,996	4,836	
	COMPUT.MCH.TECH 2	MILW	410,000	435,000	345,000		
	COMPUTER MCH.TECH.	MILW	160,000	160,000			
	COMPUTER SCI.	MILW	15,100	18,350	22,500	120,000	
	ELEC-ELECTROMECH.	MILW	6,570	5,200	1,300	400	1,700
	ELEC-INSTRUMENT.	MILW	16,320	13,400	39,000	7,700	
	ELEC. TECH.	SOUTH	77,000				
		MILW	7,400	6,900	6,000	3,500	5,000
	ELEC.TECH.	MILW	30,210	17,700	17,750	15,600	18,000
	ELEC/ERTV	MILW	7,000	5,000	800	2,400	
	ELECTRON.SRVG.	MILW	20,278				

5-YEAR EQUIPMENT BUDGET

DIVISION	DEPT.	CAMPUS	1986	1987	1988	1989	1990
	ELECTRONICS	MILW		86,200			
	ELECTRONICS LABS	MILW	12,060	18,550	56,600	23,070	
	EMERG.MED.SRVS.	MILW.	17,600	4,400	3,550	6,050	2,150
	FIRE TECH.	MILW	3,600				
	FOUNDRY	MILW	8,650	48,000	10,000	42,000	
	HYD/PNEUMATICS	MILW		236,600	47,000		
	INDUS.ENG.TECHN.	MILW	8,200	8,200	7,260	7,260	7,260
	MACHINE SHOP	MILW	78,400	10,400	2,400		
		SOUTH	71,510				
	MACHINE SHOP 2	MILW	384,650	381,325	1,373,025		
		SOUTH	247,500	172,000	99,500		
	MACHINE SHOP CNC	MILW	112,000	175,000	225,000	15,000	
	MASONRY	MILW	250	2,435	125	125	
	MECH.COMPUT.DRFTG.	WEST	1,500	5,700	5,700	5,700	4,200
	MECH.DESGN.TECH.	MILW	17,845	10,368	15,997	7,477	
	METALLURGY	MILW	27,400	16,500	128,000		
	OFF.MACH.REPR.	SOUTH	150,250				
	PLASTICS	MILW	90,000	43,500	212,060		
	SHOE SERVICE	MILW	20,600		400		
	SM.ENG.REPR.	WEST	1,400	3,450	3,800	6,500	
	TOOL & DIE	NORTH	386,800	243,350	126,350	13,500	
		MILW	274,400	173,300	123,650	109,450	14,300
	UPHOLSTERY	MILW	5,550	4,230	3,300		
		WEST	2,310	3,520	4,750		640
	WELDING	SOUTH	7,900	4,500	11,140		
		WEST	7,100	10,100	4,500		
		MILW	43,273	8,937			
	WELDING TECH.	MILW	73,250	84,700	48,210	9,500	
		TOTAL:	3,185,614	2,909,945	3,371,643	505,188	164,500
		TOTAL:	8,731,710	7,825,838	6,636,184	2,489,949	2,768,927

CHAPTER XI

FIVE-YEAR FINANCE PLAN

Introduction

The Five-Year Finance Plan is both a product of the Five-Year Educational Plan recommendations and a limiting strategic parameter because of the 1.5 millrate limitation on operating tax levy revenue. In these times of fiscal constraints and economic uncertainty, there is a need to assess the longer term financial health of MATC--where is it, how did it get there, and where does it want to be in the future? This Finance Plan is a first attempt to provide a five-year operational finance plan based on the educational program needs of the District and the MATC Board's Strategic Planning Statements.

The Finance Plan reviews historical data to identify meaningful financial trends that account for the current fiscal condition of MATC. The goal is to identify potential problems and recommend appropriate actions in a planning mode rather than a crisis mode.

The objectives of the Finance Plan section of the MATC Master Plan are:

1. To describe the current fiscal condition of MATC.
2. To review historical MATC revenue and expenditure trends.
3. To project alternative MATC revenues and expenditures to 1989-90.
4. To recommend actions for implementation of the Finance Plan.

Current Fiscal Condition

The present fiscal condition of the Milwaukee Area Technical College is strong as evidenced by the solid fund balance reserve positions, the extremely low level of debt, and the fact that there have been no operating deficits. MATC has retained a favorable credit rating due to the strong financial position maintained over the years. Factors that account for the solid fiscal condition of MATC are:

A. The diversity of the District's economy.
B. The diversity of the District's revenue sources.
C. The sound planning, budgeting, and management processes utilized by the District.

The critical limiting factor for MATC at the present time is the legislatively mandated operating tax rate limit of 1.5 mills on the equalized value (i.e., market value) of District property, excluding the increases in the Tax Incremental Districts (TID) which are included in the tax base when calculating the debt limitation of 2%. MATC's operating tax rate for 1984-85 was 1.4791 or 98.6% of the 1.5 limit, while the outstanding principal amount of debt of $13,747,841 has been at 5% of the limit for the last 4 years. The key questions are how did MATC reach the limit and how has MATC been able to stay within the limit given property valuation growth of less than 3.3% and state aid increases of 3% each of the last two years, while faculty wages have risen 8%, 8%, 5.5%, and 5.5%, respectively?

Historical MATC Revenue and Expenditure Trends

A review of the Historical Financial Analysis presented in Table 1 gives some indication of how MATC has managed to stay within the mill limitation given the unfavorable legislative actions noted later in this section. First, the planning, budgeting, and management processes have been utilized to implement the following:

A. Careful planning to identify low priority programs and services which could be reduced to fund program expansions and revenue shortfalls.

B. Critical annual budgeting to effect the resource reallocations while maximizing the revenues from non-tax levy sources.

C. Continuous management of the budget to control actual expenditures and maximize services.

Second, the operating levy provided to other funds has been reduced. In many instances this was done by increasing revenue from other sources, such as interest income, federal aids, and private donations rather than by severe cuts in programs.

Third, MATC has increased user fees, especially for the nonaidable type of programs such as avocational courses which now are charged at 100% of direct costs.

Fourth, MATC has shifted most of the capital budget financing from the operating tax levy to the debt service levy. This method of financing not only increases state aids but also provides a degree of taxpayer equity by more closely aligning the benefits of these capital expenditures with the costs.

The previous section gives some indication of how MATC has managed to stay within the 1.5 limit, but does not indicate how MATC moved so close to the limit. Movement toward the 1.5 limit is due mostly to factors beyond MATC's control, such as:

A. Elimination of machinery and equipment (M&E) from taxable valuation over a 5-year period starting in 1977-78. This reduced MATC's tax base by about 13%.

B. Elimination of increases in the equalized value of the Tax Incremental Districts from taxable valuation starting in 1977-78. About $330,000 is currently excluded for these Tax Incremental Districts which might not be added back to the tax base until 1997 and beyond.

The effects of A and B above are shown in Graph 1 which indicates that MATC would be at 86.15% of the limit in 1984-85 instead of the 98.61% had the legislature not reduced the tax base. In addition, the legislature started funding the VTAE System at levels below 35% beginning in 1979-80. MATC's state aid shortfall has risen from about $300,000 in 1979-80 to about $2,150,000 in 1984-85 which if added to the tax base reductions would result in a 1.2115 rate or 80.87% of the limit equal to about the 1978-79 level. These factors, then, along with binding arbitration awards which granted 5.5% faculty salary increases in 1983-84 and 1984-85, largely answer the question of how MATC reached the range near the 1.5 operating mill limitation.

TABLE 1

HISTORICAL FINANCIAL ANALYSIS

(In Thousands)

	ACTUAL 1980	% OF TOTAL	ACTUAL 1981	% OF TOTAL	ACTUAL 1982	% OF TOTAL	ACTUAL 1983	% OF TOTAL	ACTUAL 1984	% OF TOTAL
REVENUES										
TAX LEVY	22,654	47.2%	28,758	54.0%	32,262	55.0%	32,944	53.2%	33,607	51.4%
PERCENT CHANGE			26.9%		12.2%		2.1%		2.0%	
STATE AID	14,296	29.8%	13,400	25.2%	15,000	25.6%	16,927	27.3%	17,551	26.9%
PERCENT CHANGE			-6.3%		11.9%		12.8%		3.7%	
TUITION	4,760	9.9%	5,858	11.0%	5,714	9.7%	7,060	11.4%	7,257	11.1%
PERCENT CHANGE			23.1%		-2.5%		23.6%		2.8%	
FEDERAL	2,978	6.2%	3,008	5.6%	3,144	5.4%	2,830	4.6%	2,950	4.5%
PERCENT CHANGE			1.0%		4.5%		-10.0%		4.2%	
OTHER	3,330	6.9%	2,236	4.2%	2,584	4.4%	2,188	3.5%	3,962	6.1%
PERCENT CHANGE			-32.9%		15.6%		-15.3%		81.1%	
TOTAL REVENUE	48,018	100.0%	53,260	100.0%	58,704	100.0%	61,949	100.0%	65,327	100.0%
PERCENT CHANGE			10.9%		10.2%		5.5%		5.5%	
EXPENDITURES										
SALARIES & WAGES	29,447	59.4%	32,280	61.0%	36,364	61.6%	38,973	63.7%	40,516	63.4%
PERCENT CHANGE			9.6%		12.7%		7.2%		4.0%	
FRINGE BENEFITS	6,397	12.9%	7,050	13.3%	8,188	13.9%	8,822	14.4%	10,351	16.2%
PERCENT CHANGE			10.2%		16.1%		7.7%		17.3%	
OPERATING EXPENSES	9,147	18.4%	9,094	17.2%	9,945	16.8%	10,171	16.6%	10,440	16.3%
PERCENT CHANGE			-0.6%		9.4%		2.3%		2.6%	
CAPITAL OUTLAY	1,938	3.9%	1,891	3.6%	1,579	2.7%	1,176	1.9%	855	1.3%
PERCENT CHANGE			-2.4%		-16.5%		-25.5%		-27.3%	
TAX LEVY FOR OTHER FUNDS	2,682	5.4%	2,606	4.9%	2,954	5.0%	1,998	3.3%	1,784	2.8%
PERCENT CHANGE			-2.8%		13.3%		-32.4%		-10.7%	
TOTAL EXPENDITURES	49,611	100.0%	52,923	100.0%	59,030	100.0%	61,140	100.0%	63,946	100.0%
			6.7%		11.5%		3.6%		4.6%	

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GRAPH 1

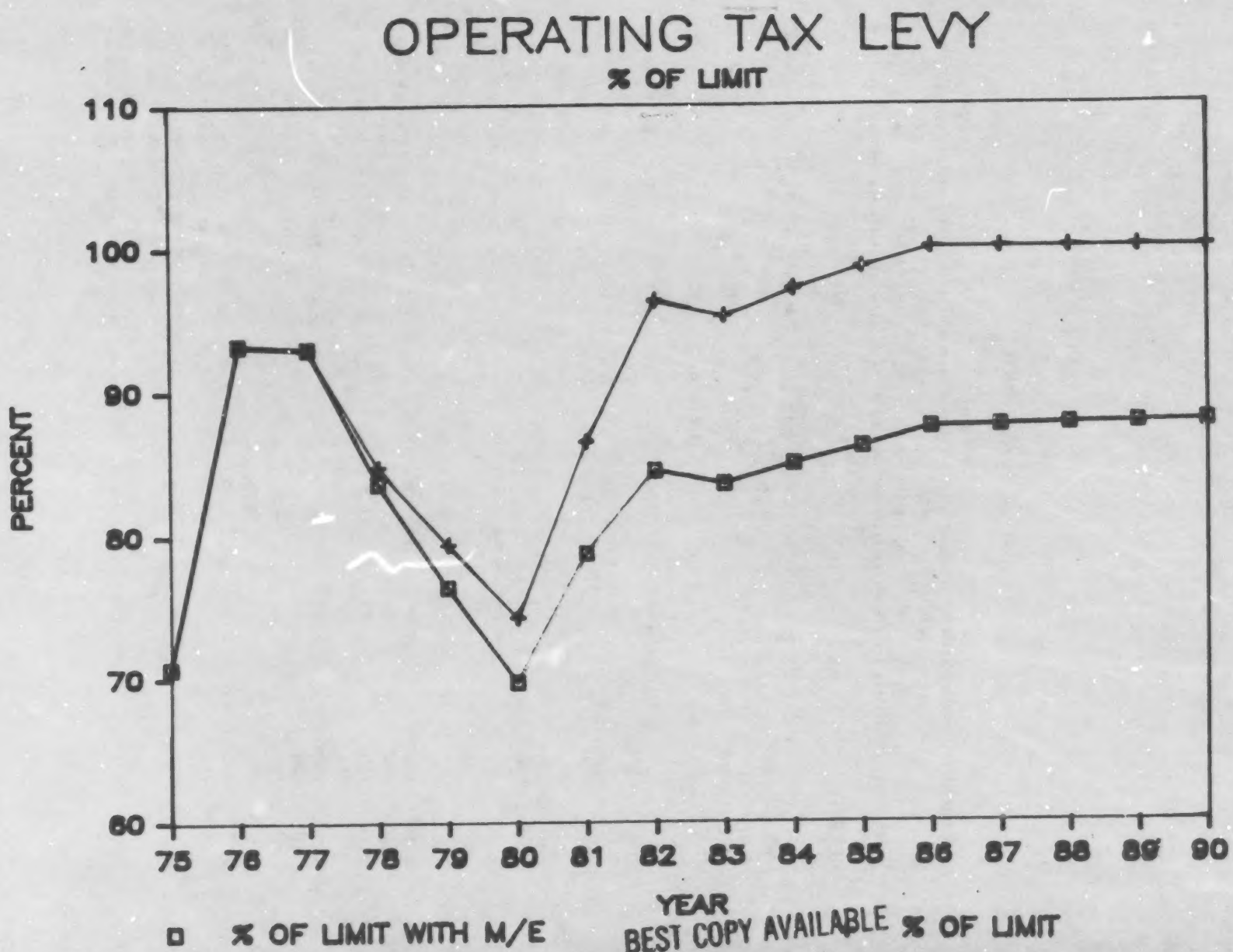

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Table 2 presents the debt financing capacity of MATC, which is equal to 2% of equalized valuation including the TID increases, and shows the amounts of the general obligation notes issued from 1973-74 to the present and the percent of the legal limit. The $22,000,000, $1,900,000, and $500,000 for 1978-79 issues have already been retired. Given that the state VTAE has informed MATC that the actual legal limit is 5% of valuation, the debt limits shown should be viewed as very conservative.

In summary, MATC has had to take definitive steps to stay within the 1.5 operating mill limitation. Capital investments in energy saving projects and labor saving projects, such as the Management Information Systems, have been coupled with the steps outlined above to provide the needed educational services within a restricted resource base.

Alternative MATC Revenues and Expenditures To 1989-1990

Table 3 presents three alternative projections for operating expenditures which are based on the following assumptions:

	Budget Impact Assumptions		
	Low	Medium	High
Equalized Valuation:	+1%	+2%	+3%
Revenue:			
Property Tax Levy			
General Fund	(Maximum Available at 1.5 Mills)		
Restricted Fund	+1%	+2%	+3%
Capital Projects Fund	$300,000	$400,000	$500,000
Student Aid Fund	80,000	90,000	100,000
Television Fund	+5%	+6%	+7%
External Contracts Income	+15%	+20%	+25%
State Aid	+5%	+6%	+7%
Department Revenue	(Current Level)		
Miscellaneous Revenue	(Current Level)		
Interest Income	(Current Level)		
Tuition Revenue	(Current Level)		
Federal Aids	(To Balance Restricted Fund)		
Expenditures:			
Salaries and Wages	+3%	+5%	+7%
Fringe Benefits	+5%	+7%	+9%
Operating Expenses	+5%	+6%	+7%

Given that only the high revenue projection matched with the low expenditure projection yields a balanced budget, it is apparent that the planning, budgeting, and management process employed in the past will continue to be needed in the future. In addition, definitive efforts are needed to positively change the assumptions to achieve a balanced budget while

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TABLE 2

Five-Year Educational Master Plan - Finance Plan

Budget Year	Taxable Valuation Plus TID Increment	Percent Change	Total Debt Capacity 2% Of Valuation	Debt Principal Outstanding	Debt As A Percent Of Limit	Notes Issued
1973-74	10,944,196,800	15.25%	218,884,000	42,219,793	19.29%	22,000,000
1974-75	12,212,936,800	11.59%	244,259,000	39,886,325	16.33%	
1975-76	13,834,267,600	13.28%	276,685,000	37,243,175	13.46%	8,500,000
1976-77	14,794,347,300	6.94%	295,887,000	43,386,700	14.66%	1,900,000
1977-78	16,053,024,000	8.51%	321,060,000	41,956,069	13.07%	
1978-79	17,991,126,713	12.07%	359,823,000	38,120,072	10.59%	500,000
1979-80	20,403,944,189	13.41%	408,079,000	34,557,442	8.47%	500,000
1980-81	22,240,061,114	9.00%	444,801,000	30,768,248	6.92%	500,000
1981-82	22,424,617,779	0.83%	448,492,000	26,748,660	5.96%	500,000
1982-83	23,247,535,849	3.67%	464,951,000	22,494,593	4.84%	500,000
1983-84	23,338,815,653	0.39%	466,776,000	18,334,323	3.93%	1,000,000
1984-85	23,622,310,443	1.21%	472,446,000	13,747,841	2.91%	2,550,000
1984-85				36,057,841	7.63%	22,310,000
1985-86	23,858,534,000	1.00%	477,171,000	32,247,841	6.76%	
1986-87	24,097,119,000	1.00%	481,942,000	29,093,727	6.04%	500,000
1987-88	24,338,090,000	1.00%	486,762,000	24,973,727	5.13%	500,000
1988-89	24,581,471,000	1.00%	491,629,000	23,630,939	4.81%	3,000,000
1989-90	24,827,286,000	1.00%	496,546,000	22,487,464	4.53%	3,000,000
1990-91	25,075,559,000	1.00%	501,511,000	20,994,316	4.19%	3,000,000
1991-92	25,326,315,000	1.00%	506,526,000	19,449,011	3.84%	3,000,000
1992-93	25,579,578,000	1.00%	511,592,000	17,108,842	3.34%	3,000,000
1993-94	25,835,374,000	1.00%	516,707,000	14,701,763	2.85%	3,000,000
1994-95	26,093,728,000	1.00%	521,875,000	12,850,428	2.46%	3,000,000

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TABLE 3

LOW REVENUE PROJECTION COMPARISON

	Actual 84	Budget 85	Projected 86	Projected 87	Projected 88	Projected 89	Projected 90
LOW REVENUE PROJECTION	65,327	67,712	68,715	70,365	72,103	73,937	75,773
LOW EXPENDITURES PROJECTION	63,946	67,712	69,948	72,490	75,132	77,879	80,734
DIFFERENCE	1,381		(1,233)	(2,125)	(3,029)	(3,942)	(4,961)
LOW REVENUE PROJECTION	65,327	67,712	68,715	70,365	72,103	73,937	75,773
MEDIUM EXPENDITURES PROJECTION	63,946	67,712	71,262	75,116	79,187	83,486	88,028
DIFFERENCE	1,381		(2,547)	(4,751)	(7,084)	(9,549)	(12,555)
LOW REVENUE PROJECTION	65,327	67,712	68,715	70,365	72,103	73,937	75,773
HIGH EXPENDITURES PROJECTION	63,946	67,712	72,576	77,788	83,386	89,398	95,857
DIFFERENCE	1,381		(3,861)	(7,423)	(11,283)	(15,461)	(20,084)

MEDIUM REVENUE PROJECTION COMPARISON

	Actual 84	Budget 85	Projected 86	Projected 87	Projected 88	Projected 89	Projected 90
MEDIUM REVENUE PROJECTION	65,327	67,712	69,275	71,653	74,155	76,816	79,666
LOW EXPENDITURES PROJECTION	63,946	67,712	69,948	72,490	75,132	77,879	80,734
DIFFERENCE	1,381		(673)	(837)	(977)	(1,063)	(1,068)
MEDIUM REVENUE PROJECTION	65,327	67,712	69,275	71,653	74,155	76,816	79,668
MEDIUM EXPENDITURES PROJECTION	63,946	67,712	71,262	75,116	79,187	83,486	88,028
DIFFERENCE	1,381		(1,987)	(3,463)	(5,032)	(6,670)	(8,362)
MEDIUM REVENUE PROJECTION	65,327	67,712	69,275	71,653	74,155	76,816	79,666
HIGH EXPENDITURES PROJECTION	63,946	67,712	72,576	77,788	83,386	89,398	95,857
DIFFERENCE	1,381		(3,301)	(6,135)	(9,231)	(12,582)	(16,191)

HIGH REVENUE PROJECTION COMPARISON

	Actual 84	Budget 85	Projected 86	Projected 87	Projected 88	Projected 89	Projected 90
HIGH REVENUE PROJECTION	65,327	67,712	70,016	72,919	76,383	79,937	83,760
LOW EXPENDITURES PROJECTION	63,946	67,712	69,948	72,490	75,132	77,879	80,734
DIFFERENCE	1,381		68	429	1,251	2,058	3,026
HIGH REVENUE PROJECTION	65,327	67,712	70,016	72,919	76,383	79,937	83,760
MEDIUM EXPENDITURES PROJECTION	63,946	67,712	71,262	75,116	79,187	83,486	88,028
DIFFERENCE	1,381		(1,246)	(2,197)	(2,804)	(3,549)	(4,268)
HIGH REVENUE PROJECTION	65,327	67,712	70,016	72,919	76,383	79,937	83,760
HIGH EXPENDITURES PROJECTION	63,946	67,712	72,576	77,788	83,386	89,398	95,857
DIFFERENCE	1,381		(2,560)	(4,869)	(7,003)	(9,461)	(12,097)

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provicing the services outlined in the Five-Year Educational Master Plan. Beyond the operating budget the Five-Year Educational Plan proposes a major retooling program within the capital budget that is directly tied to the objectives for the educational programs.

Table 4 is a Capital Budget Plan Summary which reflects both the equipment and facilities proposed in the Five-Year Educational Plan. Note the actual note issue amounts have been adjusted to exclude borrowing for the Auxiliary and Television Fund operations. The Construction part of the plan is at about the same level as the past several years when the separation of equipment from construction is taken into account. The five-year equipment acquisition plan totals $28.5 million which is about $12 million beyond the $15.5 million that would normally be spent. Essentially then, the difference is the major retooling program required to make up for the past underfunding of major equipment items.

Finance Plan Recommendations

The Five-Year Finance Plan deals with two elements: the Operating Budget and the Capital Budget. The Operating Budget includes the funds required to sustain day-to-day operations. The operating tax levy will reach the legal limit in the 1985-86 budget year. However, the projections for FY 1986 indicate that it might be possible to freeze the operating tax rate at the present level if the combined borrowing proposed in the Capital Budget section is implemented because it will add to the aidable cost base.

It is recommended that all program changes must be accommodated within available resources. This means that resources must be reallocated from the lower priority areas to the higher priority areas.

The Capital Budget includes the funds required to carry out construction projects and acquire equipment. To accommodate this budget, it is recommended to borrow funds to be repaid through the debt service tax levy. This recommendation is based on the following assumptions.

1. That the current note issued to the City of Milwaukee will be extended for 5 years to 1995.
2. That the entire capital plan as proposed will be implemented.
3. MATC will continue the current practice of levying for debt service and that interest income and grants will be used to reduce the levy.

It is further recommended to borrow for the first three years of equipment and the first year of construction in a single note issue of $22,310,000 with payments to begin prior to June 30, 1986. This recommendation has the following advantages:

a. It allows for better planning and assimilation of the equipment.
b. The larger issue should be at a better interest rate.
c. The funds can be invested awaiting use.
d. The debt service payments increase state aids which reduce the pressure on the operating tax levy.

In summary, the overall impact of the finance plan outlined above is presented in Table 5 which shows the impact on the tax levies and in Table 6 which shows the impact on a $50,000 home along with the changes in the Consumer Price Index. Note that all of the figures used in the projections are based on estimates which are subject to change. It is anticipated that the finance plan will and can be adjusted based on changes in the educational plans.

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TABLE 4

MILWAUKEE AREA TECHNICAL COLLEGE

Five-Year Educational Plan
Capital Budget Plan Summary

Budget Year	Construction Total	Construction Other	Construction Notes	Equipment Total	Equipment Minus Other	Equipment Notes
1982-83	$1,380,000	$880,000	$ 500,000	$1,500,000	$1,500,000	$ -0-
1983-84	1,300,000	800,000	500,000	2,000,000	1,500,000	500,000
1984-85	1,300,000	800,000	500,000	3,300,000	1,250,000	2,050,000
1985-86*	1,100,000	600,000	500,000A	8,740,000	310,000	8,430,000A
1986-87*	1,100,000	600,000	500,000B	7,830,000	800,000	7,030,000A
1987-88*	1,100,000	600,000	500,000B	6,640,000	290,000	6,350,000A
1988-89*	1,100,000	600,000	500,000C	2,500,000	-0-	2,500,000C
1989-90*	1,100,000	600,000	500,000D	2,800,000	300,000	2,500,000D
Plan Totals 1985-1990	$5,500,000		$2,500,000	$28,510,000		$26,810,000

*Projected in Educational Plan.
A. Proposed as a 10-year combined note issue of $22,310,000.
B. Proposed as individual 5-year notes of $500,000.
C. Proposed as a 5-year combined note issue of $3,000,000.
D. Proposed as a 5-year combined note issue of $3,000,000.

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TABLE 5

Five-Year Educational Master Plan - Finance Plan

Budget Year	Taxable Equalized Valuation TID-Out	Percent Change	Tax Levy Operating	Tax Rate Operating	Tax Levy Debt Service	Tax Rate Debt Service	Total Tax Levy	Total Tax Rate
1973-74	10,944,196,800	15.25%	11,796,379	1.0779	4,018,150	0.3671	15,814,529	1.4450
1974-75	12,212,936,800	11.59%	12,949,423	1.0603	4,216,900	0.3453	17,166,323	1.4056
1975-76	13,834,267,600	13.28%	19,343,861	1.3983	4,195,400	0.3033	23,539,261	1.7016
1976-77	14,794,347,300	6.94%	20,637,719	1.3950	5,636,388	0.3810	26,274,107	1.7760
1977-78	16,038,024,000	8.41%	20,395,475	1.2717	5,964,295	0.3719	26,359,770	1.6436
1978-79	17,961,126,713	11.99%	21,387,437	1.1908	5,861,960	0.3264	27,249,397	1.5172
1979-80	20,343,944,189	13.27%	22,653,506	1.1135	5,939,550	0.2920	28,593,056	1.4055
1980-81	22,163,862,854	8.95%	28,776,135	1.2983	6,017,090	0.2715	34,793,225	1.5698
1981-82	22,330,053,129	0.75%	32,262,122	1.4448	6,115,530	0.2739	38,377,652	1.7187
1982-83	23,058,735,309	3.26%	32,943,693	1.4287	5,433,959	0.2357	38,377,652	1.6644
1983-84	23,067,464,103	0.04%	33,607,575	1.4569	3,798,665	0.1647	37,406,240	1.6216
1984-85	23,288,482,083	0.96%	34,446,123	1.4791	3,875,383	0.1664	38,321,506	1.6455
1985-86	23,521,367,000	1.00%	35,282,000	1.5000	5,759,979	0.2449	41,041,979	1.7449
1986-87	23,756,581,000	1.00%	35,635,000	1.5000	5,490,637	0.2311	41,125,637	1.7311
1987-88	23,994,147,000	1.00%	35,991,000	1.5000	5,695,062	0.2374	41,686,062	1.7374
1988-89	24,234,088,000	1.00%	36,351,000	1.5000	5,753,815	0.2374	42,104,815	1.7374
1989-90	24,476,429,000	1.00%	36,715,000	1.5000	5,748,112	0.2348	42,463,112	1.7348
1990-91	24,721,193,000	1.00%	37,082,000	1.5000	5,738,000	0.2321	42,820,000	1.7321
1991-92	24,968,405,000	1.00%	37,453,000	1.5000	5,450,000	0.2183	42,903,000	1.7183
1992-93	25,218,089,000	1.00%	37,827,000	1.5000	5,894,000	0.2337	43,721,000	1.7337
1993-94	25,470,270,000	1.00%	38,205,000	1.5000	4,994,000	0.1961	43,199,000	1.6961
1994-95	25,724,973,000	1.00%	38,587,000	1.5000	3,502,847	0.1362	42,089,847	1.6362

TABLE 6

Five-Year Educational Master Plan - Finance Plan

Budget Year	Taxable Equalized Valuation TID-Out	Percent Change	Tax Rate Operating	Tax Rate Debt Service	Total Tax Rate	Total Tax $50,000 Home	Dollar Change	Percent Change	Consumer Price Index-1967	CPI Percent Change
1973-74	10,944,196,800	15.25%	1.0779	0.3671	1.4450	$72.25			139.1	
1974-75	12,212,936,800	11.59%	1.0603	0.3453	1.4056	$70.28	($1.97)	-2.73%	152.1	9.35%
1975-76	13,834,267,600	13.28%	1.3983	0.3033	1.7016	$85.08	$14.80	21.06%	166.6	9.53%
1976-77	14,794,347,300	6.94%	1.3950	0.3810	1.7760	$88.80	$3.72	4.37%	180.4	8.28%
1977-78	16,038,024,000	8.41%	1.2717	0.3719	1.6436	$82.18	($6.62)	-7.45%	194.3	7.71%
1978-79	17,961,126,713	11.99%	1.1908	0.3264	1.5172	$75.86	($6.32)	-7.69%	210.9	8.54%
1979-80	20,343,944,189	13.27%	1.1135	0.2920	1.4055	$70.28	($5.59)	-7.36%	234.2	11.05%
1980-81	22,163,862,854	8.95%	1.2983	0.2715	1.5698	$78.49	$8.22	11.69%	270.3	15.41%
1981-82	22,330,053,129	0.75%	1.4448	0.2739	1.7187	$85.94	$7.45	9.49%	305.7	13.10%
1982-83	23,058,735,309	3.26%	1.4287	0.2357	1.6644	$83.22	($2.72)	-3.16%	333.3	9.03%
1983-84	23,067,464,103	0.04%	1.4569	0.1647	1.6216	$81.08	($2.14)	-2.57%	344.9	3.48%
1984-85	23,288,482,083	0.96%	1.4791	0.1664	1.6455	$82.28	$1.20	1.47%	361.9	4.93%
1984-85										
1985-86	23,521,367,000	1.00%	1.5000	0.2449	1.7449	$87.25	$4.97	6.04%	376.4	4.00%
1986-87	23,756,581,000	1.00%	1.5000	0.2311	1.7311	$86.56	($0.69)	-0.79%		
1987-88	23,994,147,000	1.00%	1.5000	0.2374	1.7374	$86.87	$0.32	0.36%		
1988-89	24,234,088,000	1.00%	1.5000	0.2374	1.7374	$86.87	$0.00	0.00%		
1989-90	24,476,429,000	1.00%	1.5000	0.2348	1.7348	$86.74	($0.13)	-0.15%		
1990-91	24,721,193,000	1.00%	1.5000	0.2321	1.7321	$86.61	($0.14)	-0.16%		
1991-92	24,968,405,000	1.00%	1.5000	0.2183	1.7183	$85.92	($0.69)	-0.80%		
1992-93	25,218,089,000	1.00%	1.5000	0.2337	1.7337	$86.69	$0.77	0.90%		
1993-94	25,470,270,000	1.00%	1.5000	0.1961	1.6961	$84.81	($1.88)	-2.17%		
1994-95	25,724,973,000	1.00%	1.5000	0.1362	1.6362	$81.81	($3.00)	-3.53%		

CHAPTER XII

SUMMARY AND RECOMMENDATIONS

This chapter includes a brief summary for each of the objectives in the Educational Plan.

PRESENT AND FUTURE POPULATION OF THE DISTRICT

The total population of the District is stabilizing at about one million. Major decreases in the 20-29 age group are projected for 1985 to 2000. The 15-19 age group will decline to the year 1995 and then increase. The 30-39 age group will increase significantly to 1990 and then decline to the year 2000. The number and percent of minorities is expected to increase.

Since the average age of the population will be increasing, it will be necessary for MATC to increase the proportion of the population in the 20-29 age group attending MATC, and to increase the number of students over 30 attending MATC, in order to maintain its present enrollments. A detailed analysis of the MATC population is included in Chapter I.

The number of high school graduates in the District has decreased by more than 3,000 since the mid-'70s. The number of graduates should stabilize at about 13,000 in the next four years. About 7% of high school graduates attend MATC immediately after graduation. Since 10 to 40%, or more, (great variation by high school), of 9th grade students do not graduate with their classes, four years later there is a significant number of non-high school graduates in need of GED, Basic Skills, and Vocational Training. MATC must increase the percentage of high school graduates and non-graduates to maintain its present enrollments.

DAY AND EVENING ENROLLMENT TRENDS

Fall headcount enrollment in 1984 was 38,552, a decrease from 40,919 in 1983. Headcount enrollment peaked in fall of 1974 at 44,850 when evening enrollment was at an all-time high of 30,012. Day fall headcount enrollments, which were stable in the range of 14,290 to 14,800 from 1974 to 1979, increased to 16,073 in 1980 and reached a high of 17,132 in 1983. Day enrollment decreased about 1,000 in 1984. Evening fall headcount enrollments declined from 1974 to a low of 22,949 in 1978, but have steadily increased since then to 26,073 in 1982. In 1983 and 1984, evening enrollment declined to 23,787 and 23,545, respectively, primarily due to decreases in adult avocational enrollments.

Large increases in day headcount enrollments reflect an increase in full-time students and annual full-time equivalent enrollment (FTE) which increased from a low of 12,019 in 1979-80 to 13,235 in 1981-82. Full-time equivalent enrollment for 1983-84 reached an all-time high of 14,179. A decrease of about 800 FTE is estimated for 1984-85.

Increases in FTE enrollment were largely due to the large increase of Associate Degree students in Business, General Education, and Technical courses.

FTE enrollment at regional campuses has increased significantly in the last four years. Regional campus 1983-84 FTE and increases from 1980-81 to 1983-84 are as follows: South 1,666 (+23%), North 968 (+48%), and West 1,047 (+22%).

The fall, 1984, District enrollment at MATC still remained predominantly female, with 52.7% during the day and 62.9% in the evening. MATC's first-semester 1984 day headcount enrollment was 23.2% Black, 2.5% Hispanic, 2.9% Asian, and 1.2% Native American. Ethnic minority day enrollments were increasing. MATC's fall evening headcount enrollment was 9.1% Black, 1.9% Hispanic, 1.3% Asian, and 0.6% Native American. Ethnic and minority evening enrollments have been stable. A detailed analysis of enrollments is included in Chapter IV.

Significant increases in the median age of day (27 to 31) and evening (31 to 34) students took place from 1981-82 to 1982-83. Large increases in FTE enrollment in 1982-83 and small increases in 1983-84 appear to be caused by the increases in the number of students over age 24. This median age is expected to decrease somewhat in 1984-85 as employment improves and the pool of unemployed wanting to attend MATC decreases.

In order to maintain annual FTE enrollments at the 1984-85 level of about 13,500 it will be necessary for MATC to increase the percentage of high school students who attend MATC directly after graduation, and to continue to enroll numbers of students over 24 in Associate Degree, College Parallel, and Diploma and Certificate Programs near 1982-83 and 1983-84 levels. MATC will also continue to serve the large population who discontinue their high school education prior to graduation.

FUTURE EMPLOYMENT OUTLOOK AND CHANGES IN OCCUPATIONS AND JOBS

Economic recovery is expected during the next ten years but analysts feel heavy industries will not reach past peaks because changing markets and technologies will tend to dampen expansion. Service-producing industries are projected to account for nearly 75% of all new jobs between now and 1995. High Technology industries are expected to provide only a small portion of the jobs created during that same period.

Recent research conducted by MATC indicates future jobs in Milwaukee will require workers with a knowledge and skill base that will enable them to evolve with industry. Studies regarding plastics, machine shop, and automated manufacturing have identified future jobs for workers with solid basic skills and a technical foundation for retraining and upgrading.

Service occupations, led by office workers, will continue to show growth. There will be jobs for clerical workers familiar with microcomputers and word processing equipment.

MATC's research indicates that several of the health occupations are no longer growth areas. There is much change in this area and it should be monitored closely.

Many future jobs will require only basic skills in reading, writing, and math. However, a large portion of the adult population do not possess these skills. These adults have few places to go other than MATC.

BASIC ASSUMPTIONS FOR PLANNING, AND THE CRITICAL ISSUES TO BE ADDRESSED IN EDUCATIONAL PLANNING

Basic assumptions and recommendations for the following areas are included in Chapter VI.

The basic overall assumptions utilized by the MATC Board in Stretegic Planning, and numerous others developed by the Administrative Task Forces, were used in the preparation of specific recommendations. However, a few basic assumptions were fundamental in developing plans and recommendations. These include the following:

- Enrollment, which has increased in each of the last three years, will stabilize in the next five years with some cyclical increases and decreases depending upon economic conditions. MATC enrollment will decrease in 1984-85 due to improved economic conditions.

- Because revenue base increases will be limited, reallocation of personnel and resources will be needed to meet requirements for new, expanded, or modified instructional programs or services and increased operating costs.

- Vocational and technical education, training, and upgrading which is necessary for advancement or competence in a vocational and technical skill, customized training and technical assistance to business and industry in order to foster economic development and expansion of employment opportunities, will continue to be primary objectives of educational programming, but there will be continued large demand and need for upgrading, remedial, and special education for large segments of the population, including unemployed, disadvantaged, handicapped, and minorities.

- There will be a need for continuing remodeling, renovation, and some new construction at the Milwaukee Campus to meet the physical facilities requirements for students and new or modified instructional programs.

- There will be a continuous need for upgrading of equipment and related facilities for technological advances in instruction at all campuses.

Critical issues identified and discussed in Chapter VII include the following:

a. Entrance Requirements for Instructional Programs - A procedure for implementation of entrance requirements is recommended.

b. Remedial, Basic, and Developmental Education - The need for remedial, basic, and developmental education is increasing. Recommendations regarding coordination and consolidation of personnel, facilities, and equipment to meet increasing need should be implemented. Expansion and modification of the developmental curricula will be necessary as entrance requirements are implemented.

c. Evaluation of Instructional Programs - Procedures for program evaluation have been implemented. Enrollment, placement, completion rate, cost, productivity, and other criteria should be reviewed for all programs each year to identify those that require improvement or consideration for discontinuance. Limited financial resources will require constant monitoring of programs and services.

d. Outreach, Customized Training, and Technical Assistance - MATC has always played an important role in economic development in the Milwaukee community by providing outreach, customized training, and technical assistance to business and industry. In 1983-84 MATC provided 263 special programs and courses for about 73 firms and agencies.

A Business and Education Liaison Council should be utilized to aid in identifying those areas where specific outreach training would be beneficial. This would include increasing outreach instruction in emerging technologies such as flexible manufacturing, laser applications, computer-aided design, and others. Also, business and industry should be served by seminars and workshops in such areas as automated office procedures, innovative trends and procedures, basic communication skills, and other related skills. In addition, MATC should expand the level of technical assistance provided to local business and industry to aid such companies in developing a skilled and efficient work force.

An MATC Outreach Management Committee will be utilized for District-wide planning, coordinating, and monitoring of outreach activities. Conference and teleconferencing facilities for use by business and industry programs should be developed at the Milwaukee Campus. Regional campus facilities should also continue to be used and modifications for better utilization should be made when appropriate.

e. High School Contract Program and Adult High School - Services provided by MATC fall into three general categories: 1) Pool funding; 2) Contract slot-ins; and 3) Contract classes. With changes in interpretation of Wisconsin Statutes, Chapters 118 and 38, MATC's contract association with local high schools appears uncertain.

Contracted Services - There are seven school districts involved in contracted classes with MATC, and approximately 360 students per semester. There are 24 sections of pool funding projects involving approximately 1,200 students per year. If state aids are not allowed for contracted services, consideration should be given to revising contracts with high school districts so that courses may be changed to state aidable categories.

The Adult High School functioning at MATC is unique and the only one in existence in Wisconsin. It is designed to serve the needs of those adults who have not completed the requirements for a high school diploma.

It serves approximately 1,000 students yearly. Planning assumptions and recommendations for the future of the High School Contract and Adult High School are discussed in the High School Contract Program and Adult High School issue paper in Chapter VII.

f. High Technology Programming - Development of high technology programs started in the early Sixties with the purchase of computer equipment. Since that time, there has been a continuous upgrading of high technology equipment and curricula in all instructional divisions. Two major federal grants from NSF ($250,000), and FIPSE ($300,000) assisted the development of Computer-Assisted Design (CAD) and Flexible Manufacturing Systems (FMS) instruction starting in 1980. Major remodeling in the T Building and F Building have provided expanded facilities for CAD, CAM, Plastics, and other high technology activities. Electronics Labs at the Milwaukee Campus are being upgraded. New electronics facilities are being developed at Regional Campuses. Plans are being developed for the purchase of educational equipment modifications of facilities throughout the District in all instructional divisions.

Rapidly developing and expanding use of high technology equipment and methodology have created a need not only for new, regular courses and programs but also for retraining and upgrading of employees in the public and private sectors. MATC educational delivery systems will have to be adapted so that students who want to enroll in associate degree and diploma and certificate programs can still be accommodated, but also individual courses, workshops, training sessions, and information in high technology should be made available and accessible to individuals presently employed or seeking employment in a new occupational area.

MATC Proposed Institutional Programming
1985-1990

1985-1986

New Programs

1. Small Business Training - Certificate, Evenings, All Campuses
2. Supervisors Management - Associate Degree, Evenings, All Campuses
3. Landscape Management - Associate Degree, North Campus
4. Homemaker-Home Health Aide-Home Companion - Certificate, Milwaukee Campus
5. Home Furnishings Assistant (Reactivate) - Diploma, West Campus

Expand Existing Programs

1. Legal Secretary - Associate Degree, Add second year, South Campus
2. Medical Secretary - Associate Degree, Add first year, West Campus
3. Electronic Systems Technology - Associate Degree, Convert from JTPA to Regular Offering, West Campus
4. Administrative Assistant/Information Processing - Associate Degree, Add second year, West Campus
5. Administrative Assistant/Information Processing - Associate Degree, Add first year, South Campus
6. Physical Therapist Assistant - Associate Degree, Add one section, January start, Milwaukee Campus
7. Business Data Processing - Associate Degree, Add second year, North Campus
8. Medical Assistant - Diploma, Add one section, Milwaukee Campus
9. Expand Basic Skills, All Campuses
10. Expand College Parallel, All Campuses
11. Expand Telecourse/Teleconferencing instruction
12. Expand Customized Training Business, Industry and Labor Programs

Modify Existing Programs

1. Biomedical Electronics Technology - Associate Degree, Transfer from Milwaukee Campus to North Campus
2. Funeral Service - Associate Degree, Transfer from Milwaukee to West Campus
3. Visual Communication/Video - Associate Degree, Convert from a film to a video emphasis, Milwaukee Campus
4. Radiologic Technology - Associate Degree, Add a Diagnostic Imaging component to the program, Milwaukee Campus
5. Practical Nursing - Diploma, Modify curriculum to emphasize geriatric care, Milwaukee Campus
6. Basic Skills - Integrate all components, Crossover, ABE, Developmental, Tutoring, into a single program, all campuses
7. Wellness Program - Redesign the physical education program into a wellness program

Consolidate, Reduce, or Discontinue Existing Programs

1. Legal Secretary - Associate Degree, Discontinue at West Campus, consolidate at remaining locations
2. Real Estate - Associate Degree, Discontinue day program, continue evening program only, Milwaukee Campus
3. Transportation - Associate Degree, Discontinue day program, continue evening program only, Milwaukee Campus
4. Clerk-Typist - Certificate, Discontinue at all regional campuses, enroll students in Word Processing program
5. Welding - Certificate, Discontinue, North Campus
6. ERTV - Certificate, Discontinue at South Campus, consolidate at Milwaukee Campus
7. Practical Nursing - Diploma, Reduce program size from 180 to 80 students, Milwaukee Campus
8. Mechanical Drafting - Certificate, Discontinue, South Campus
9. Respiratory Therapy - Associate Degree, Reduce one section, Milwaukee Campus

Review for Possible Reduction/Discontinuance

1. Welding Technology - Associate Degree, Milwaukee Campus
2. AC, Ref., & Heating - Certificate, South Campus
3. Alterationist - Diploma, Milwaukee and West Campuses
4. Baking - Diploma, Milwaukee Campus
5. Air Frame/Power Plant Aviation Mechanics - Diploma, South Campus
6. Bricklaying and Masonry - Diploma, Milwaukee Campus
7. Foundry - Certificate, Milwaukee Campus
8. Horology - Diploma, Milwaukee Campus
9. NC-Part Programmer - Certificate, Milwaukee Campus
10. Hydraulics/Pneumatics - Diploma, Milwaukee Campus
11. Pharmacy Technical Aide - Diploma, Milwaukee Campus
12. Nursing Assistant - Certificate, Milwaukee Campus
13. Health Unit Clerk - Certificate, Milwaukee Campus
14. Architectural Technology - Associate Degree, Milwaukee Campus
15. Civil Technology - Associate Degree, Milwaukee Campus

1986-87

New Programs

1. Machine Repair - Diploma, West Campus
2. Office Machine Repair - Certificate, South Campus
3. Fast Food Preparation - Certificate, Milwaukee Campus
4. Alcohol and Drug Counseling - Associate Degree, Milwaukee Campus
5. Telecommunications Tech. - Associate Degree, Milwaukee Campus
6. Office Automation Specialist - Diploma, North Campus
7. ROTC - Military Science, All Campuses
8. Laser Instrumentation Technology - Associate Degree, Milwaukee Campus
9. Industrial Sewing - Certificate, Milwaukee Campus

Expand Existing Programs

1. Other Programs - expand as need is verified based on program review

Modify Existing Programs

1. Mechanical Computer Drafting - Certificate, add CAD emphasis
2. Other Programs - Modify as need is verified based on program review

Consolidate, Reduce, or Discontinue Existing Programs

1. Physical Education - Discontinue Physical Education 101 requirements for Associate Degree day students, all campuses
2. Other Programs - Reduce or Discontinue as indicated by review

Review for Possible Reduction/Discontinuance

1. Continue to review/evaluate all programs

1987-1988

New Programs

1. Computer Information Systems - Associate Degree, Milw.& West Campuses
2. Fast Food Industry Management - Associate Degree, Milwaukee Campus
3. Electronic Design and Packaging - Associate Degree, North Campus
4. Microcomputer Electronics Tech. - Associate Degree, Milwaukee Campus
5. Office Machine Repair - Diploma, State of Wisconsin Prison
6. Occupational Therapy Assistant - Associate Degree, State of Wisconsin Prison
7. Computer Operations - Diploma, State of Wisconsin Prison
8. Printing - Diploma, State of Wisconsin Prison
9. Other Programs - Add new programs as indicated by review

Expand Existing Programs

1. Office Automation Specialist - Certificate, South Campus
2. Catering - Diploma, Milwaukee Campus
3. Other Programs - Expand programs as indicated by review

1987-1988 (Cont.)

Modify Existing Programs

1. Other Programs - Modify programs as indicated by review

Consolidate, Reduce, or Discontinue Existing Programs

1. Graphic Communications - Diploma, Discontinue at West Campus, consolidate at Milwaukee Campus
2. Other Programs - Reduce or Discontinue as indicated by review

Review for Possible Reduction/Discontinuance

1. Continue to review/evaluate all programs

1988-89

New Programs

1. Laser Machining - Certificate, Milwaukee Campus
2. Other Programs - Add programs as indicated by review

Expand Existing Programs

1. Other Programs - Expand programs as indicated by review

Modify Existing Programs

1. Other Programs - Modify programs as indicated by review

Consolidate, Reduce, or Discontinue Existing Programs

1. Other Programs - Reduce or discontinue as indicated by review

Review for Possible Reduction/Discontinuance

1. Continue to review/evaluate all programs

1989-1990

New Programs

1. International Marketing - Associate Degree, Milwaukee Campus
2. Other Programs - Add new programs as indicated by review

Expand Existing Programs

1. Other Programs - Expand programs as indicated by review

Modify Existing Programs

1. Other Programs - Modify programs as indicated by review

Consolidate, Reduce, or Discontinue Existing Programs

1. Other Programs - Reduce or discontinue as indicated by review

Review for Possible Reduction/Discontinuance

1. Continue to review/evaluate all programs

Plans for Educational Programs/Services (Cont.)

Apprentice Programs - Enrollment of apprentices has fluctuated greatly because of changes in economic conditions and the work force. MATC will continue to support apprentice education and be the primary provider of related training to apprentices in the Milwaukee area. Because of the decreasing numbers of apprentices in joint employer and labor programs, alternatives to using full-time faculty should be investigated and used when feasible. Develop articulation between apprenticeship and existing vocational technical programs.

High School Contract Programs - Contracting with secondary schools to provide educational opportunities to high school students has been established as a priority by the State and the MATC Board. MATC will increase cooperative programs, articulation projects, and high school contracting in future years. If high school contract courses are not made aidable by the State VTAE Board, these courses should be offered as aidable vocational courses with appropriate changes made in contracting agreements with high school districts to increase state aids for direct and indirect costs.

Avocational/General Interest Courses - MATC will continue to offer avocational courses whenever economically feasible. Course fees will continue to be established that provide for revenues that cover 100% of direct instructional costs. Efforts will be made to reduce direct costs by reducing number of hours and adjusting salaries for part-time instructors so that course fees remain reasonable for avocational courses.

Telecourses and Teleconferencing - MATC has been among the leaders nationally in teleconferencing and the production and distribution of telecourses through the facilities of Channels 10/36. MATC will continue these activities for general MATC use as well as for business, industry, and labor. The new building at the Milwaukee Campus will enable MATC to significantly expand its programs and services to the community and participate in economic development activities.

Customized Contract Instruction - Customized training for business and industry is important for economic development and job creation in the community. MATC will increase outreach instruction in emerging technologies such as flexible manufacturing, laser applications, computer-aided design, and others. Also, business and industry should be served by seminars and workshops in such areas as automated office procedures, innovative trends and procedures, basic communication skills, and other related skills. In addition, MATC should expand the level of technical assistance provided to local business and industry to aid such companies in developing a skilled and efficient work force.

An MATC outreach management committee will be utilized for district-wide planning, coordinating, and monitoring of outreach activities. Continuing education staff coordinators will be utilized for each instructional division - Business and Graphic Arts, Health, Home Economics, General Education, and Technical and Industrial. Conference facilities for use by business and industry programs will be developed at the Milwaukee Campus. Regional campus facilities should also continue to be used, and modifications for better utilization should be made when appropriate.

Cooperative Education - MATC will continue its commitment to Cooperative Education to provide the opportunity for MATC, the student, and the local industrial and business community to combine efforts to provide students with a relevant and meaningful educational experience. It is a goal of the Cooperative Education Department to increase placements about 30% to 400 in the next three years. This expansion will be the result of Business Division internships, increased placements with small business, and new industrial technology, such as Flexible Manufacturing. Cooperative arrangements will become a part of the regular curriculum of more programs in the future.

Special Services and Programs

Handicapped Programs - Three programs for the handicapped are funded through Vocational Amendment funding: Services for the Visually Impaired (VIP); Services for the Hearing Impaired (HIP), and Basic Vocational Development Project for the Mentally Retarded. Additional funding and services for the handicapped are provided by the Wisconsin Department of Vocational Rehabilitation. The VIP and HIP programs will continue to be operated with some consolidation of personnel and facilities for greater efficiency so that more individuals can be served. The program for the mentally retarded will also be coordinated with VIP and HIP and modified so as to serve more learning disabled individuals.

Women's Bureau - The MATC Women's Bureau provides support services for women, and vocational education services for displaced homemakers and other special groups. Persons of all ages and ethnic origins are welcome to participate in group interaction, seminars, and individualized counseling in a supportive environment. These programs are funded in part by Vocational Amendment funds allocated by the Wisconsin VTAE Board. The need for these programs and services will continue with increased coordination into all Student Services Division activities.

Family Living - Through group interaction, the MATC Family Living Department provides community outreach discussion groups for more than 7,000 individuals for living. Some current areas for discussion are: Stress Management, Parent Education, Self-Development, Older Adults, Death and Dying, Health and Safety and Marriage Encounter. The Family Living Department is a part of the outreach activities of the Student Services Division and will continue to be coordinated with all MATC programs and services, especially with the Women's Bureau.

Community Based Organizations (CBOs) - MATC cooperates with community based organizations in the District in a variety of activities. Currently, nine vocational education, basic education, or consumer education projects are funded at six CBOs through Vocational Amendment funding. In addition, ten projects are funded at CBOs through MATC for out-of-school youth education (Milwaukee Youth Inititives), along with scholarships to MATC for CBO students utilizing JTPA funds. MATC provides monitoring and technical assistance services for these activities.

MATC will continue to work with CBOs and increase assistance through MATC seminars and workshops for CBO staff, and comprehensive monitoring of activities, and will explore the feasibility of expanding educational programs at the CBOs.

Outreach Services - MATC will continue to provide many outreach services such as Native American, Hispanic, and neighborhood recruiting, counseling, and advising; Career Van; School and Career Day visitations; fair and convention displays, and special events in the community. Outreach activities will be increased in order to better serve the disadvantaged and minority population in the District. MATC plans to explore offering developmental classes at selected CBOs.

Institute for Vocational Readiness (IVR) - The Institute for Vocational Readiness is a comprehensive assessment center that utilizes psychometric, psychomotor, job sampling, and situational assessment procedures. The IVR Center will be integrated with other student services counseling activities and placement in facilities to be constructed in the new building at the Milwaukee Campus. Coordination of IVR, counseling, and placement activities will provide expanded service to MATC students.

Driver's Education - MATC will continue to study driver's education offerings, particularly Behind the Wheel, to determine whether this program is cost effective in the total MATC operation. Alternatives for reducing the costs of driver's education instruction, or having other agencies provide the instruction, will be evaluated.

Support Services

Library (Educational Media) - Expansion of the library at the Milwaukee Campus has been a long-term need which is being addressed in remodeling of existing facilities. The library will be expanded by about 6,000 sq.ft. on the second floor (273) in the area vacated by Student Services when it is moved to the new building. The C Building library will be closed (net loss 2,000 sq.ft.) and the materials and services will be consolidated in the Main Building. The library collection of about 35,000 volumes will eventually be more than doubled. The 2nd and 3rd floors of the library will be connected with a stairway.

The Audio Visual Aids Department will be moved from its present location on the 3rd floor to the library area which will allow for expansion of the use of media in the library. Media delivering systems including audio and visual tapes, on-line computer information, and microcomputers, will be expanded at all MATC Campuses. The range and depth of software and hardware will be expanded.

EQUIPMENT ACQUISITION PLAN

In order for MATC to continue to be a leader in vocational and technical education, it is necessary that instructional equipment be upgraded to reflect new skills and technology.

The Instructional and Administrative Support Divisions have projected equipment needs for the next five years. The total cost of new or replacement equipment by year is estimated as follows:

EQUIPMENT BUDGETS BY DIVISION

5-YEAR EQUIPMENT BUDGET SUMMARY

DIVISION	1986	1987	1988	1989	1990
ADMINISTRATION	26,900	29,250	12,500	14,000	17,500
AGRIBUSINESS	89,550	78,640	74,600	9,000	7,000
AUXILIARY SRVS.	60,100	492,950	16,800	7,200	12,900
BUSINESS	320,663	226,325	92,700	100,100	27,000
GEN. INSTITUTION	540,750	435,000	454,000	415,000	1,351,000
GENERAL ED	210,270	124,565	74,750	144,600	66,000
GRAPHIC ARTS	1,084,099	146,850	296,800	0	0
HEALTH OCCUP.	222,469	163,309	226,476	105,561	112,127
HOME ECON.	166,810	98,043	41,200	17,050	2,000
HS RELATIONS	0	180,865	38,400	0	0
INSTRUC. SRVS.	1,022,121	1,061,654	596,104	870,950	433,100
PHYSICAL PLANT	1,391,900	1,277,400	1,008,900	156,400	392,300
PUBLIC TV	250,099	296,055	274,850	104,300	183,500
SERVICE OCCUP.	60,260	130,787	56,461	40,600	0
STUDENT SRVS.	100,105	173,700	0	0	0
T&I	3,185,614	2,909,945	3,371,643	505,188	164,500
TOTAL:	8,731,710	7,825,838	6,636,184	2,489,949	2,768,927

These requests have been reviewed by Occupational Advisory Committees and MATC Administration. It is recommended that promissory notes be utilized for the purchase of new and replacement equipment.

PHYSICAL FACILITIES PLAN

New Construction

A new building which enhances the image of MATC will be constructed at the Milwaukee Campus at Seventh and State Streets, which includes the following:

a. A main entrance for new students into a comprehensive, consolidated, Student Service facility, including Admissions, Counseling, IVR (Institute for Vocational Readiness), Registration and Records, Testing, Financial Aids, Placement, and services for special need students.

b. Consolidated Student Affairs and Activities facilities including offices, conference rooms, lounge and recreation areas, and multipurpose room and food services in new construction.

c. A multipurpose Conference and Teleconferencing Center for general use and for business and industry economic development activities.

New construction should be within the Capital Funds, about $6.8 million, currently available for such purposes.

Vacated Areas

About 47,000 square feet of area will be vacated when Student Services and Student Affairs functions are moved to the new building. The Math Center (X Building), and ABE Classrooms (G Building), will be tentatively relocated in the C Building Library and C Building Cafeteria and adjacent areas respectively. Remodeling of vacated areas is scheduled in three phases over 3 or 4 years which will include: Expansion of Library on 2nd floor of Main Building; remodel C Building Cafeteria for ABE and Basic Education Programs; new, expanded Bookstore in basement of Main Building; expansion of Business Office, administrative offices, classrooms, and instructional work areas. Total cost of 3 phases is estimated to be $2,300,000.

Annual Remodeling and Renovation Projects

Facilities for new and modified instructional programs will be provided through remodeling and renovation of existing facilities. Over $16 million of remodeling has taken place at the Milwaukee Campus since 1973, and it will be necessary to continue upgrading older facilities at the Milwaukee Campus in addition to providing adequate facilities for new or expanding programs. Remodeling at Regional Campuses will be limited to changes required for adding new or expanded programs or services.

Major remodeling and renovation and major building repair will all be funded from the annual $1 million Budget allocation or Capital Projects prior year balances. Requests for remodeling and renovation are reviewed each year by the MATC Administration, and recommendations are made to the MATC Board each year. Major requests for remodeling and renovation are listed in Chapter IX. To finance approved projects each year, it will be necessary to utilize promissory notes each year for the next five years in additon to an MATC Budget allocation of $500,000 each year.

Building Repair

The MATC Engineering and Building Services Department has developed lists of building repair projects in two categories:

1. Operating Budget Projects:

   Projects which are of a type that must be done routinely each year, i.e., painting, floor coverings, furniture, etc. These projects are funded through annual budget allocations in the Engineering and Building Services Department Budget. As shown on page 122, the suggested minimum annual expenditure for Operating Budget Building Repairs is $700,000.

2. Capital Projects:

   Major building repair projects that have an individual project cost too high to be included in the annual Budget for Building Repairs, i.e., HVAC improvement in C Building $2,000,000, have been identified and will be evaluated annually to determine which projects will be included in Capital Projects each year.

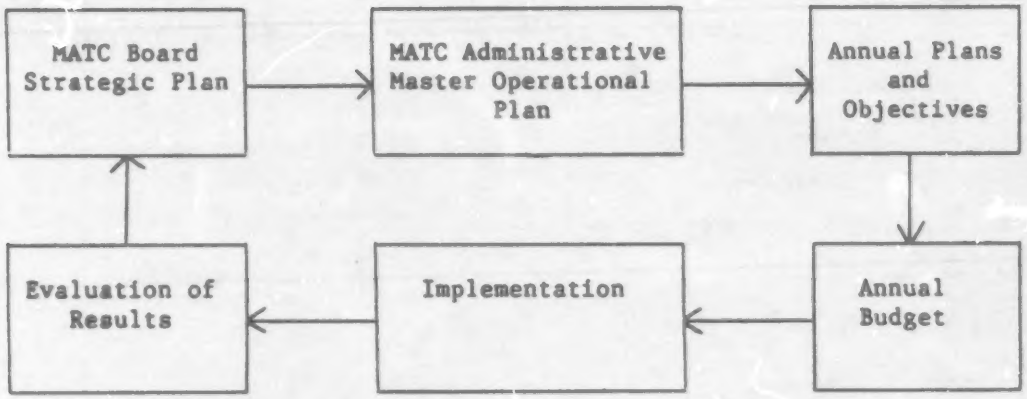
FINANCE PLAN

The present fiscal condition of the Milwaukee Area Technical College is strong as evidenced by the solid fund balance reserve positions, the extremely low level of debt, and the fact that there have been no operating deficits. The critical limiting factor for MATC at the present time is the legislatively mandated operating tax rate limit of 1.5 mills on the equalized value (i.e., market value) of District property, excluding the increases in the Tax Incremental Districts (TID) which are included in the tax base when calculating the debt limitation of 2%. MATC's operating tax rate for 1984-85 was 1.4791 or 98.6% of the 1.5 limit while the outstanding principal amount of debt of $13,747,841 is at 5% of the limit for the last 4 years. It is recommended that all program changes must be accommodated within available resources. This means that resources must be reallocated from the lower priority areas to the higher priority areas.

An Equipment Acquisition Plan for the purchase of $28 million of equipment over the next five years has been developed. In addition it is planned to use $500,000 of debt service funds each year for the next five years for facility remodeling. Additional remodeling funds will be budgeted from the tax levy and other sources. The Capital Budget includes the funds required to carry out construction projects and acquire equipment. To accommodate this budget, it is recommended to borrow funds to be repaid through the debt service tax levy. It is further recommended to borrow for the first three years of equipment and the first year of construction in a single note issue of $22,310,000 with payments to begin prior to June 30, 1986. This recommendation has the following advantages:

a. It allows for better planning and assimilation of the equipment.
b. The larger issue should be at a better interest rate.
c. The funds can be invested awaiting use.
d. The debt service payments increase state aids which reduce the pressure on the operating tax levy.

MATC PLANNING PROCESS



Strategic planning is the responsibility of the MATC Board. Utilizing strategic policies established by the MATC Board, the MATC Administration has developed its Operational Master Plans. The operational planning process includes:

1. Development of background data and operational planning assumptions by MATC staff.

2. Preparation of preliminary departmental and divisions' operational program, facility, and equipment plans.

3. Review of departmental and division plans by the District Director, Executive Dean, and Administrative Cabinet, followed by hearings with division Deans to verify rationale and support data for program recommendations.

4. After completion of programming plans, division physical plant and equipment acquisition plans developed with faculty and staff participation are reviewed. Division programming, facility, and equipment plans are reviewed by Program Advisory Committees. Hearings with division Deans and department heads are held by MATC Administration.

5. Preliminary draft of Five-Year Master Plan is reviewed by District Director and Executive Committee members, followed by submission to MATC Board for review and approval.

APPENDIX A

MATC PROGRAM DISTRIBUTION BY CAMPUS

(BY 1990)

PROGRAM	CAMPUS			
	MILWAUKEE	NORTH	SOUTH	WEST
BUSINESS DIVISION				
ASSOCIATE DEGREE:				
Landscape Management		X		
Agribusiness - Services and Supplies		X		
DIPLOMA & CERTIFICATE:				
Horticulture		X		
Arboriculture/Urban Forestry		X		
Ornamental Horticulture		X		
ASSOCIATE DEGREE:				
Accounting	X	X	X	X
Business Administration - Banking & Finance	X			
Business Mid-Management	X	X	X	X
Computer Programming	X	X		1st Yr
Computer Info. Systems	X			X
International Marketing	X			
Legal Assistant	X			
Marketing - Communications	X	1st Yr		
Marketing - Management	X	X		1st Yr
Materials Mgt. (Eve)	X			
Fashion Merchandising	X			
Retail Management	X			
Transport'n & Distr. (Eve)	X			
Real Estate (Eve)	X			
SecSci - Admin. Asst. - Secretarial	X	X	X	1st Yr
Legal Secretary	X	X	1st Yr	

MATC PROGRAM DISTRIBUTION BY CAMPUS

(BY 1990)

PROGRAM	CAMPUS			
	MILWAUKEE	NORTH	SOUTH	WEST
BUSINESS DIVISION (CONT.)				
ASSOCIATE DEGREE (CONT):				
MEDICAL SECRETARY	X			1ST YR
ADMIN. ASST.-INFORMATION PROCESSING	X	X	1ST YR	X
SUPERVISOR MGT. (EVE)	X	X	X	X
DIPLOMA & CERTIFICATE:				
DATA PROC. MACH. OPER.				X
CLERK-TYPIST	X			
OFFICE AUTOMATION SPEC.		X	X	
WORD PROC. SPECIALIST	X	X	X	X
SMALL BUS. TRAINING (EVE)	X	X	X	X
GRAPHIC & APPLIED ARTS DIV.				
ASSOCIATE DEGREE:				
COMMERCIAL ART	X			
PHOTOGRAPHY TECHNICIAN	X			
PRINTING & PUBLISHING - OPERATIONS	X			
VISUAL COMM./VIDEO	X			
DIPLOMA & CERTIFICATE:				
JEWELRY SERVICE & SALES	X			
PRINTING & PUBLISHING - PRINTING	X			
GRAPHIC COMMUNICATIONS	X			

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PROGRAM	CAMPUS			
	MILWAUKEE	NORTH	SOUTH	WEST
HOME ECONOMICS DIVISION				
ASSOCIATE DEGREE:				
Child Development - Child Care & Development	X			
Dietetic Tech. - Nutr. Care	X			
Interior Design		X		
Housekeeping Mgt.				X
DIPLOMA & CERTIFICATE:				
Child Development - Child Care Services	X			
Tailoring	X			X
Alterationist	X			X
Food Preparation Asst.			X	
Baking	X			
Home Furnishings Asst.				X
Homemaker-Home Health Aide-Home Companion	X			
Industrial Sewing	X			
SERVICE & HEALTH OCCUPATIONS DIVISION				
ASSOCIATE DEGREE:				
Fire Technology	X			
Restaurant & Hotel Cookery	X			
Fast Food Mgt.	X			
Funeral Services				X
Human Services - Human Services Associate	X			
Police Science	X		1st Yr	
Dental Hygiene	X			

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PROGRAM	CAMPUS			
	MILWAUKEE	NORTH	SOUTH	WEST
SERVICE & HEALTH OCCUPATIONS DIVISION (CONT.)				
ASSOCIATE DEGREE (CONT):				
DENTAL LAB TECHNOLOGY	X			
ENVIRONMENTAL HEALTH TECH.		X		
WATER & WASTEWATER TECH.		X		
MEDICAL LAB TECHNOLOGY	X			
REGISTERED NURSING	X			
OCCUPATIONAL THERAPY ASST.	X			
PHYSICAL THERAPIST ASST.	X			
RADIOLOGIC TECHNOLOGY	X			
RESPIRATORY THERAPY	X			
DIPLOMA & CERTIFICATE:				
BARBERING	X			
COSMETOLOGY	X			
FAST FOOD PREPARATION	X			
DENTAL ASSISTANT	X			
MEDICAL ASSISTANT	X			
NURSING - PRACTICAL NURS.	X			
NURSING - HEALTH UNIT CLERK	X			
NURSING ASSISTANT	X			
OPERATING ROOM ASSISTANT	X			
PHARMACY TECH'L AIDE	X			
INDUSTRIAL DIVISION				
DIPLOMA & CERTIFICATE:				
AIR COND., REF., & HTG.			X	
APPLIANCE SERVICING	X			
AUTOMOBILE SERVICING	X		X	

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PROGRAM	CAMPUS			
	MILWAUKEE	NORTH	SOUTH	WEST
INDUSTRIAL DIVISION				
DIPLOMA & CERTIFICATE (CONT)				
AUTO BODY SERVICING			X	
AIRFRAME AVIATION MECH.			X	
POWERPLANT AVIATION MECH.			X	
BRICKLAYING & MASONRY	X			
CABINETMAKING & MILLWORK	X		X	
CARPENTRY	X		X	
COMBUSTION ENGINES SERV.		X	X	
ELECTRICITY	X			
ELECTRONICS, RADIO & TV - ELECTRONICS SERVICING	X			
LASER MACHINING	X			
OFFICE MACHINE REPAIR	X			
MACHINE MOLDER & MACHINE COREMAKER	X			
LOOSE MOLDER	X			
HOROLOGY (WATCHMAKING)	X			
HYDRAULICS-PNEUMATICS	X			
MACHINE REPAIR				X
MACHINE SHOP	X		X	
MECHANICAL DRAFTING				X
NUMERICAL CONTROL - PART PROGRAMMER	X			
INDUSTRIAL PLASTICS	X			
SHOE SERVICING	X			
SMALL ENGINE & CHASSIS MECHANIC				X
TOOL AND DIE MAKING	X	X		
UPHOLSTERY	X			X
WELDING	X	(EVE)	X	X

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PROGRAM	CAMPUS			
	MILWAUKEE	NORTH	SOUTH	WEST
TECHNICAL DIVISION				
ASSOCIATE DEGREE:				
Air Conditioning and Refrig. Technology			X	
Architectural Technology	X			
Chemical Technology	X			
Public Works Technician	X			
Structural Technician	X			
Combustion Engines Tech.			X	
Computerized Machining Technician	X			
Electrical Technology -				
Industrial Electronics	X		X	
Communications	X			
Computer Science	X			
Industrial Instrument'n	X			
Biomedical Electronics		X		
Elec. Systems Tech'n				X
Elec. Design & Pkg.		X		
Electromechanical Tech	X			
Fluid Power Tech. (Eve)	X			
Indust. Engrg. Tech'n	X			
Laser Instrumentation Tech.	X			
Mfg. Engrg. Tech'n (Eve)	X			
Mechanical Design Tech'n	X			
Metallurgical Tech.	X			
Plastics Tech'n (Eve)	X			
Telecommunications Tech'n	X			
Welding Technology	X			

MATC PROGRAM DISTRIBUTION BY CAMPUS

(BY 1990)

PROGRAM	CAMPUS			
	MILWAUKEE	NORTH	SOUTH	WEST
TELEVISION DIVISION				
ASSOCIATE DEGREE:				
Telecasting	X			
GENERAL EDUCATION DIVISION				
ASSOCIATE DEGREE:				
Alcohol & Drug Abuse Counseling	X			
General Education Prog.	X	X	X	X
Occupational Music	X			
NON-DEGREE				
Crossover, General	X	X	X	X
Pre-Business	X	X	X	X
Pre-Graphics	X	X	X	X
Pre-Home Economics	X	X	X	X
Pre-Health	X	X	X	X
Pre-Service	X	X	X	X
Pre-Technical	X	X	X	X
Pre-Telecasting	X	X	X	X
Basic Education Developmental Skills Classes	X	X	X	X

APPENDIX B

FIVE-YEAR AVERAGE OF ENROLLMENT, GRADUATES, and PLACEMENT PERCENTAGES OF MATC ASSOCIATE DEGREE AND DIPLOMA PROGRAMS

The Department of Research, Planning and Development conducts program evaluation and program monitoring. Program monitoring includes the regular gathering and reporting of program statistics. The following tables show four of the statistics gathered for the 1983-84 program monitoring. These statistics are defined as follows:

1. Capacity - The Associate Degree capacity is the number of spots for incoming freshmen in each program. The Diploma Program capacity is the number of spots for new and continuing students in each program. The Machine Molder and Loose Molder capacity is low because the adult students in these programs share classroom space with high school contract students.

2. Enrollment Percentage - The average percent of actual enrollment relative to program capacity over the last five years (in certain high-demand areas, classes are sometimes overloaded).

3. Graduation Percentage - The average percent of graduates from each program relative to the size of the appropriate freshman class over the last five years.

4. Placement Percentage - The average percent of graduates employed in a job related to their training relative to the number of graduates in the job market over the last five years.

ASSOCIATE DEGREE

Program No	Program	Capacity	Enroll %	Grad %	Place
(10)0-06:1	Agribusiness Services & Supplies	15	22%	80%	71%
(10)1-01:1	Accounting	84	143%	68%	74%
(10)1-02:2	Banking and Finance	28	91%	51%	49%
(10)1-02:3	Business Mid-Management	56	106%	63%	62%
(10)1-04:3	Marketing Management	28	120%	64%	59%
(10)1-04:4	Fashion Merchandising	28	87%	19%	91%
(10)1-04:7	Retail Management	28	61%	41%	91%
(10)1-04:9	Transportation and Distribution	28	39%	93%	59%
(10)1-06:2	Admin. Assistant-Secretarial	116	60%	32%	90%
(10)1-06:3	Legal Secretary	116	53%	29%	97%
(10)1-06:4	Medical Secretary	24	124%	32%	88%
(10)1-06:7	Admin. Asst.-Information Processing	62	85%	29%	64%
(10)1-07:1	Business Data Processing	112	138%	31%	73%
(10)1-10:1	Legal Assistant	28	118%	36%	28%
(10)1-94:1	Real Estate	28	63%	35%	18%
(10)2-01:1	Commercial Art	88	181%	30%	57%
(10)2-03:1	Photography Technician	72	163%	18%	58%
(10)2-04:2	Printing and Publishing-Operations	69	123%	41%	90%
(10)2-06:1	Visual Communications	25	113%	31%	43%
(10)2-06:2	Motion Picture Technician	25	95%	23%	22%
(10)3-03:1	Dietetic Technician-Nutritional Care	24	110%	26%	84%
(10)3-07:1	Child Care and Development	35	98%	40%	83%
(10)5-03:1	Fire Technology	40	108%	68%	65%
(10)5-04:1	Police Science	70	145%	91%	77%
(10)5-06:1	Environmental Health Technology	18	54%	26%	88%
(10)5-06:2	Water & Wastewater Technology	18	36%	155%	67%
(10)5-07:1	Dental Laboratory Technology	25	84%	53%	57%
(10)5-08:1	Dental Hygiene	25	99%	67%	93%
(10)5-10:1	Registered Nursing	190	106%	68%	94%
(10)5-13:1	Medical Laboratory Technology	20	97%	50%	83%
(10)5-14:1	Occupational Therapy Assistant	32	96%	33%	84%
(10)5-15:1	Respiratory Therapy	52	93%	73%	985
(10)5-18:1	Restaurant and Hotel Cookery	72	96%	51%	87%
(10)5-20:3	Human Service Associate	90	94%	35%	50%
(10)5-24:1	Physical Therapy Assistant	20	108%	77%	97%
(10)5-26:1	Radiological Technology	24	93%	54%	72%
(10)5-28:1	Funeral Service	40	70%	60%	99%
(10)6-01:1	Air Cond & Refrig. Tech.	40	82%	61%	73%
(10)6-03:1	Chemical Technology	24	80%	44%	92%
(10)6-04:1	Combustion Engine Technology	20	49%	66%	58%
(10)6-05:1	Industrial Electronics	68	103%	31%	72%
(10)6-05:2	Communications	48	118%	36%	85%
(10)6-05:3	Computer Science	48	116%	36%	83%
(10)6-05:4	Industrial Instrumentation	24	105%	43%	75%
(10)6-05:6	Biomedical Electronics	24	118%	45%	91%
(10)6-06:1	Mechanical Design Technician	48	105%	42%	80%
(10)6-07:5	Structural Technician	24	78%	39%	72%
(10)6-07:8	Public Works Technician	24	48%	39%	79%
(10)6-13:1	Metallurgical Technology	16	80%	51%	84%
(10)6-14:1	Architectural Technology	48	73%	23%	78%
(10)6-20:1	Electromechanical Technology	24	93%	28%	53%
(10)6-21:1	Welding Technology	24	92%	15%	53%
(10)6-23:1	Industrial Engineering Technician	30	100%	44%	60%
(10)7-01:1	Telecasting	32	101%	29%	42%
(10)8-05:1	Occupational Music	25	94.17%	12.79%	22%

DIPLOMA PROGRAMS

Program No	Program	Capacity	Enroll %	Grad %	Place %
(30)4-15:3&4	Machine Molder; Loose Molder	8*	94%	100%	29%
(31)0-01:1	Horticulture	48	45%	41%	58%
(31)0-01:2	Arboriculture/Urban Forestry	24	65%	53%	79%
(31)1-03:5	Word Processing Specialist	88	90%	35%	47%
(31)1-06:1	Clerk-Typist	80	100%	20%	43%
(31)2-04:1	Printing	48	100%	35%	76%
(31)3-03:3	Food Preparation Assistant	24	85%	83%	43%
(31)3-03:4	Baking	18	68%	103%	60%
(31)3-07:1	Child Care Services	24	89%	67%	61%
(31)4-02:2&3	Airfr Av Mech; Pwrplt Av Mech	40	84%	85%	43%
(31)4-04:1	Auto Body Servicing	16	133%	100+%	36%
(31)4-04:3	Automobile Servicing	132	82%	72%	53%
(31)4-08:1	Bricklaying and Masonry	18	81%	19%	14%
(31)4-09:1	Cabinetmaking and Millwork	35	101%	74%	44%
(31)4-10:1	Carpentry	53	82%	44%	33%
(31)4-12:3	Combustion Engines Servicing	32	155%	91%	42%
(31)4-13:1	Electricity	22	101%	92%	43%
(31)4-19:1	Hydraulics-Pneumatics	16	80%	78%	27%
(31)4-20:1	Machine Shop	118	78%	40%	37%
(31)4-21:1	Mechanical Drafting	46	68%	66%	34%
(31)4-33:1	Shoe Servicing	18	81%	49%	57%
(31)4-40:1	Upholstery	34	107%	55%	43%
(31)4-42:1	Welding	95	99%	68%	27%
(31)4-44:1	NC-Part Programmer	32	81%	52%	32%
(31)4-45:1	Appliance Servicing	18	96%	57%	35%
(31)5-01:1	Barbering	22	114%	139%	95%
(31)5-02:1	Cosmetology	72	92%	89%	79%
(31)5-08:1	Dental Assistant	30	102%	71%	86%
(31)5-09:1	Medical Assistant	24	97%	49%	83%
(31)5-10:1	Practical Nursing	150	101%	60%	94%
(31)5-12:1	Operating Room Assistant	32	100%	61%	72%
(31)5-36:1**	Pharmacy Technical Aide	16	**		
(32)0-01:1	Ornamental Horticulture	24	129%	59%	85%
(32)4-14:1	Electronics Servicing	46	96%	73%	58%
(32)4-39:1	Tool and Die Making	16	106%	61%	45%
(32)4-71:1	Horology	16	53%	59%	100%

*Adult Students are stacked with High School Contract Students.
** New Program; Not enough information for Five-Year Averages.

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